



CFA Institute Research Challenge

Hosted by

CFA Society Italy

Team: FTSE MIB

RECORDATI S.P.A.

Italy | Pharmaceutical | Primary & Specialty Care

Initial Coverage | 28th February 2017

BUY

Price: €29.50
Target Price: € 34.80

RECORDATI

Ticker: REC:IM (BB), REC-IT(FactSet), REC.MI (TR)

Listed on: Borsa Italiana

MARKET DATA:

Main Shareholders:

Insider: FIMEI S.p.A: 51.79% (Financial Holding of Recordati Family)

Recordati S.p.A: 2%

Alberto Recordati: 155,000

Andrea Recordati: 135,008

Friz Squindo: 334,216

Institutional: 20.7%

Top 10 Institutional Holders: 10.2%

Shares Outstanding (M): 209.1

Market CAP: 6170.22

Free Float: 46.1%

Stock Data 52 week-range:

€20.66 - €29.75

Average Daily Volume (over 1 year): 446,163.9

Key Financials:

	2016E	2017E	2018E
EPS	1.14	1.27	1.58
DPS	0.7	0.74	0.8
P/E	26.55x	22.9x (NTM)	21.54x
PEG	1.8x	-	-
EV/EBIT	19.01	17.1 (FY1)	15.96 (FY2)
EV/EBITDA	71.02	15.31x (NTM)	14.32 (FY2)

Recordati, a continuous creation of value

We initiate our coverage of Recordati (REC) with a **BUY** recommendation and a **EUR 34.80 target price**. REC is an Italian-based, rampant, multinational company operating in the pharmaceutical market (of \$1tn size). We believe **the market is currently underestimating REC's potential** because: a) the pharmaceutical market is expected to grow at a 4-7% CAGR, and is forecasted to reach the size of \$1.4tn by 2021. b) REC's performance in its main segments is firmly connected to its proven ability of forming successful partnerships with industry leaders. c) Potential entrance in new markets. d) The firm is improving its cash generation leading to better opportunities for the Group.

Originator and Licensing Experts

Backed by a strong value proposition, **REC is well set to grow further** in its market. Even though REC is a small player on the pharmaceutical arena, it has the potential to develop fully its market share and pursue its future targets.

Through a vast product range of specialty treatments in remunerative therapeutic areas and a broad pipeline of innovative products, REC attempts to satisfy the unmet needs of its broad customer base. **Its focus on niche-segments has allowed relatively high margins (EBIT Margin 28.7% in 2016)**. Furthermore, **REC has experienced a sustainable growth: revenues have grown at a CAGR of 7% from 2007 to 2016**, reaching a value of EUR 1,153.9M in 2016. This rise has been supported by the M&A policy persevered by the Group. We expect REC to see an unbridled growth in the next 5 years attributable to: a) the defense of its market share in consolidated markets. b) The entrance in new markets, e.g. market of nervous system disorders. c) Implementation of orphan drugs pipeline.

Growth supported financially

The growing trend is projected by revenues increasing at a 9.6% CAGR over the analyzed period, reaching EUR 1,823m in 2021. This increase is aligned to a margins improvement (EBIT margin of 32.9% in 2021). Our estimates project EPS to increase by 77.7% over the analyzed period, reaching a value of EUR 2.14 in 2021 (EUR 1.20 in 2015).

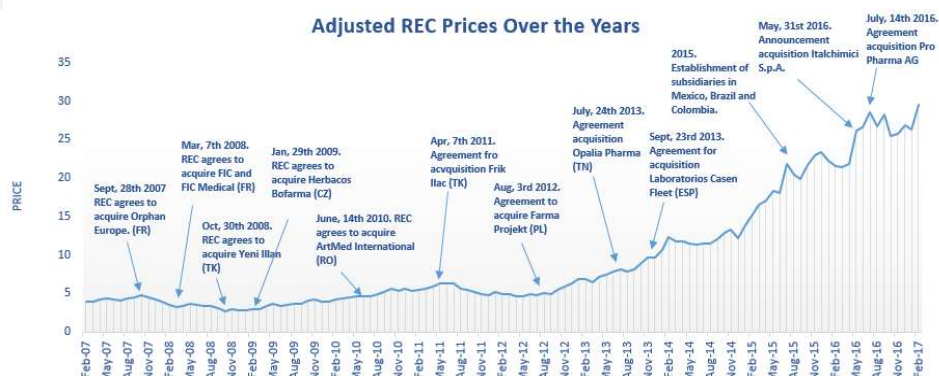
Valuation

Our recommended **TP of 34.80€** is found with a **two-stage DCF** using a **levered 6.56% WACC** and **terminal growth** equal to **2%**, a multiple valuation and Holt response with different weights (80%, 10%, 10% respectively).

Industry multiples used in our analysis were P/E, PEG, EV/EBITDA and EV/EBIT ratios in 2016 and in the next two years. Nonetheless, we consider the DCF estimates to be more in line with the group's intrinsic value and potential of generating future revenues.

Main Risks to REC

Change in reimbursement policies to which REC's revenues are intrinsically related, patent expiration and substitution by generics, unsuccessful product launch and failure in reaching operative future goals, such as the prospected M&A (this last risk might concretize only after 2018 according to management declarations).



INVESTMENT SUMMARY

Recordati, a boat with the wind in its sails

We initiate our coverage of Recordati (REC) with a **BUY** recommendation and a **EUR 34.80 target price, consisting in an upside of 16% from current price of €30** (as of Feb. 28th 2017). We positively evaluate REC's future ability to enhance cash levels, which will be invested inside the company, and on the improvement of its marginality relying on the competence of REC to perform strategic partnerships.

Orphan drug potential

Our estimates forecast a **+69.2% growth of sales in the orphan drug segment** by 2021 rising from €186.8mn in 2016 to €316.037mn by 2021. We believe this will be one of the drivers of REC's future growth, due to its quick expansion in volumes and to its outstanding profitability.

A small fish in an ocean of sharks

REC is an Italian rampant multinational company operating in the wide and highly concentrated pharmaceutical market (which value is currently around \$1tn). REC focuses on **niche therapeutic segments with high potential**: cardiology, urology and rare diseases (in which REC entered in 2007 with the acquisition of Orphan Europe). Moreover, in 2018 REC will break into the field of nervous system disorders, through the launch of specialty products.

Diversify yourself

Primary & Specialty care products are crucial to REC (66.1% of total revenues in 2016). In the recent past years Zanidip and Zanipress have been the driver that brought REC to its success, (10% sales CAGR from 2003-2010). Despite market share erosion due to the patent expiration (2010 for Zanidip and 2016 for Zanipress) **REC sustained revenue growth diversifying its portfolio**, entering into new specialty areas and in the market of Orphan Drugs.

Spreading like a wildfire

REC's sales network comprises 170 countries. Headquartered in Milan, The Group operates directly through subsidiaries in foreign markets where the business is consolidated and the market is known. Where such conditions are not met, REC attempts performing M&As or license agreements to rely on partners which better know the market dynamics. The company's strategy is indeed to further expand the business in *pharmerging* markets (Far East and South America). Recently REC has broken into Turkey, Tunisia and Algeria through strategic acquisitions.

Risks

With respect to risks, mature markets (EU and USA) may be considered a stable source of revenues (cash-cows), whereas Turkey, Algeria, Tunisia and Russia are more exposed to political and economic conditions, and therefore result are more volatile.

Stronger together

The keys of REC's profitability are: a) sharing of R&D expenses with its partners, thus considerably reducing the high risk connected to the development of new treatments and b) the strong focus on unmet customers' needs, which allows REC to continuously improve its wide but specialized pipeline.

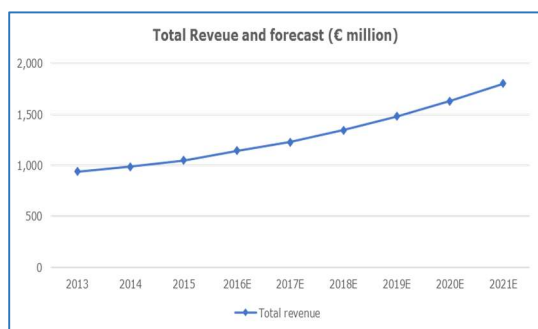
Considering the intention of the company to consolidate its presence where it is already active, EBITDA and EBIT margin is expected to grow by over 5% over the analyzed period, with further value-adding M&A operations. Therefore, we are confident that REC's ability to evaluate and select partners will lead the company to a higher level of efficiency, profitability and thus will generate additional value.

An option that may become reality

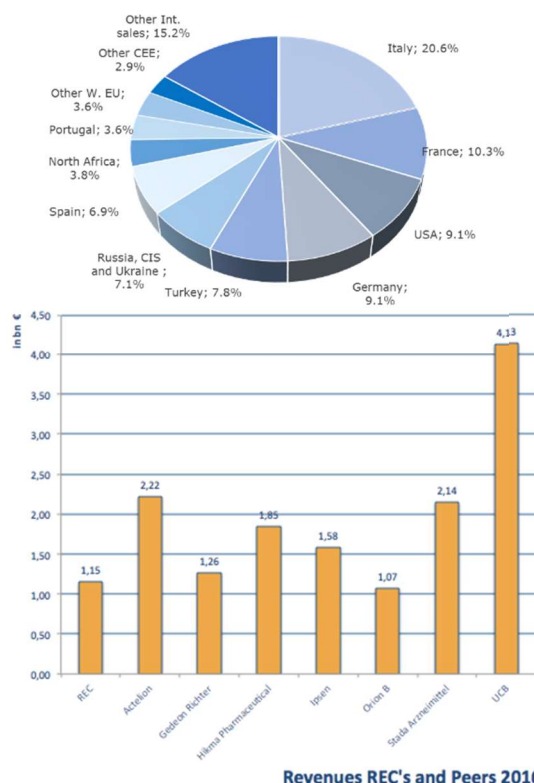
As mentioned above, M&As are strategic and crucial maneuvers for REC. Considering the business plan for the period 2017-2019, we believe there is a high probability that M&As will take place. Fusing only on a real option acquisition would be misleading as not correspondent to further evolution of the company's business and corporate structure. Consequently, a 9.6% revenue CAGR 2016-2021E is forecasted taking into consideration potentials from acquisitions.

Our valuation

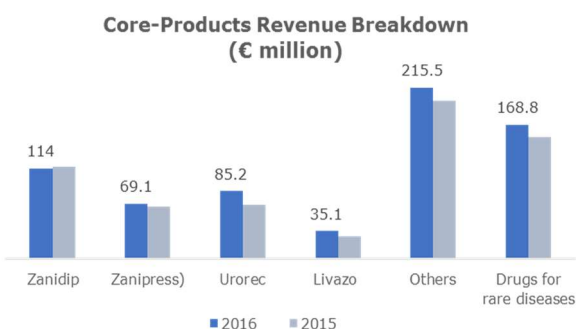
Our target price of EUR 34.80 is the result of a weighted average between **DCF Model (80%), CFROI (10%) and multiples valuation (10%)**. In order to mitigate volatility of the stock markets, we opted for an approach based on fundamentals, assigning a higher weight to our 2-stage DCF model as it is the best model that emphasizes the strong potential of REC. DCF price (Eur 37.53) was computed referring to the forecasting horizon of 5 years and employing a product-type-based estimation for future revenues. Furthermore, we computed the cost of equity with the CAPM model (estimated 5.4%) using a geographic-weighted risk-free and market risk premium, to reflect REC's global presence, and an indirect beta. A 10% weight was assigned to multiple valuation derived price (Eur 29.16), and a further 10% was assigned to Holt (discounted CFROI – EUR 32.90).



Geographical Revenue Breakdown



Revenues REC's and Peers 2016



■ 2016 ■ 2015

DIVERSIFIED PRODUCT PORTFOLIO	
Livazo	3.0%
Pharmaceutical chemicals	3.5%
Znidipres	6.0%
Urorec	7.4%
Znidip	9.9%
Other corporate products	13.4%
Drug for rare diseases	16.2%
OTC	16.1%
Subs. Local products	23.6%
Other revenue	0.9%

BUSINESS DESCRIPTION

RECORDATI: from a small laboratory to a multinational company

With a **market cap of EUR 6.16 M** and 3929 employees, Recordati (REC) is an international pharmaceutical group dedicated to the research, development, manufacturing and marketing of pharmaceuticals and chemicals. The company, founded in 1926, is headquartered in Milan and boasts a worldwide presence in the healthcare industry. Since its IPO in 1984, **REC's group has grown rapidly and has expanded its geographical coverage at a global level.** This process was accompanied by through various acquisitions of pharmaceutical companies, strategic agreements as well as through the establishment of pharmaceutical plants across Europe. The company soundly reinforced its position through the acquisition of Orphan Europe in 2007, breaking into the market of orphan drugs.

BUSINESS SEGMENTS

Recordati offers a broad range of pharmaceutical products, both proprietary and under license, in specific therapeutic areas. REC's revenues are split among:

- **Pharmaceuticals** (95.5% in 2016).
- **Pharmaceutical Chemicals** (3.5% in 2016). (Refer to appendix for more details)

The main stream of pharmaceutical comes from four main segments: **a) corporate products** (accounting 26.3% of total sales in 2016), which are mainly prescription drugs. The main therapeutic areas are cardiology (thanks to REC's flagship products Znidip and Znidipress) and urology. **b) Orphan drugs**, accounting for 16.2% of revenues in 2016. This segment offers high margins (ca. 44%) on lower volumes, and REC plans to consolidate its presence in this market. **c) OTC**, accounting for 16.1% of 2016 total revenues. **d) Subsidiaries' local products** (23.6% in 2016). Please refer to the appendix for a more detailed description of REC's products portfolio.

A small player with a global presence - REC's group comprises 6 production plants located in IT, DE, FR, TK, TU and ES. The company owns 42 subsidiaries worldwide and is currently employing 3,929 people. **Geographically REC operates in more than 170 countries** and 78.8% of its revenues stems from European countries. Italy accounts for 20.6% of the revenues. **France** and **Germany** for almost 10% respectively and **Spain** has a minor share of 6.9%. Turkey is the country with the highest potential because of the strong needs of drugs. Recordati is present also in the **U.S.A.** (9.1% of Sales in 2016), where it only distributes rare diseases drugs. In **North Africa**, the company is consolidating its presence in attractive markets such as Algeria and Tunisia. Considering that the pharmaceutical market has strong entry barriers, Recordati tries to mitigate this problem with the creation of partnerships worldwide through licenses, to facilitate commerce of drugs in those countries where REC is expanding.

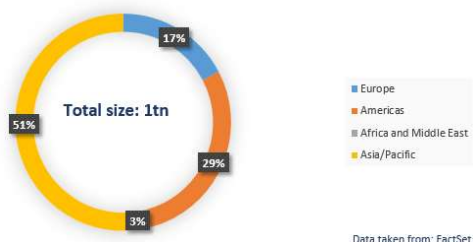
On the customers' side - REC has a wide range of customers: the pharma industry, hospitals and pharmacies, doctors, and patients, who are the main focus of REC - especially with respect to orphan drugs. REC operates directly in those countries in which it has a subsidiary; where this is not possible it attempts to obtain **license agreements** or it relies on selected partners (M&A) who boast an active sales network and with whom REC expects to have synergies. The pivotal success factor is being able to have a broad and competitive pipeline to meet the needs of its wide customer-base. Finally, a growing level of trust (due to high quality products) among the patients consolidates REC's position in its competitive environment.

STRATEGY

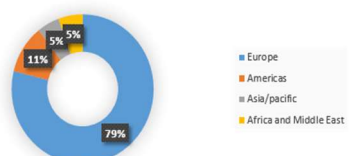
The company's short- and medium-term strategies are:

- **Strategic agreements and partnerships** - REC is establishing a strong network of partners to widen its portfolio, while reducing the overall risk related to R&D. In this way REC enters those markets where direct channels are not yet available. Economically, such a strategy is based on the claim that the EBIT of acquired products equals to the one of proprietary products over the long run.
- **Strategic acquisitions** - The increasing FCFs (€200 million in 2015) provide REC with annual funds that can be re-invested to finance acquisitions. According to the management **M&As today, and will continue to be in the coming years, are a structural maneuver REC uses for expanding and strengthening its business.** These investments are undertaken only if they guarantee solid synergies and simple integration with the acquired companies, while providing consistent return levels.

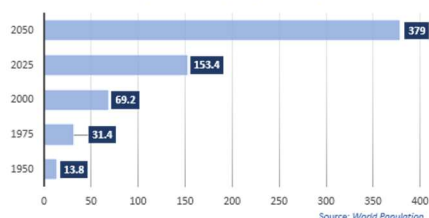
Geographical Breakdown Pharma Market - 2016



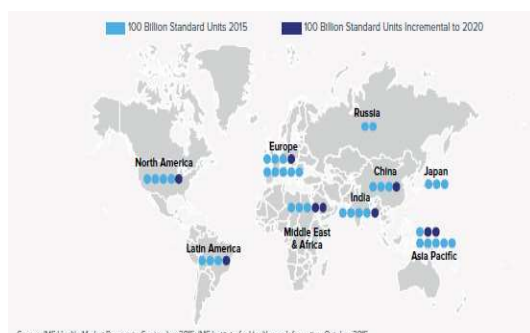
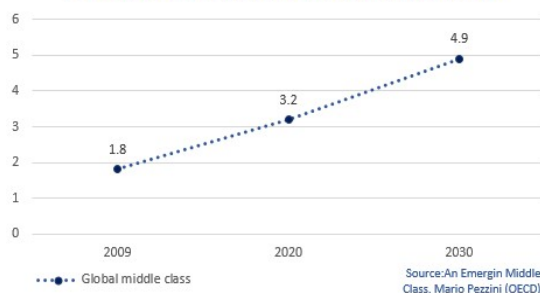
REC Geographical Exposure by Super Region



People >80 y.o. (in mn)



Growth of Global Middle Class (amounts in mn)



- Investing in a specialized pipeline – REC's business nature requires a constant research and introduction of new products. However, in 2015 R&D expenditures decreased from 8.6% of total revenue to 7.3% (proportion then kept constant in 2016). Such a decrease expresses **REC's intention of investing in a specialized pipeline (9 products)** which mainly includes products that complete the existing commercial offering.
- Consolidating the presence in Western Europe concerning primary and specialty care – to generate value from the recent acquisitions and protect its investments (Tunisian Opalia Pharma S.A. for c.a. €37 million in 2014, Italian Italcimici S.p.A for €130 million and Swiss Pro Farma AG for CHF 16 million in 2016), REC aims at becoming a strong player in Europe and the Mediterranean area. This goes to the detriment of weaker a distribution in other geographical markets, as REC's management intends to fortify primary and specialty care's business in the current markets.
- Reaching a global presence in the orphan drugs segment – as the orphan drugs business is a low-volumes high-margin one (44.6% as of 2016) where **competence** is the most valued skill, REC intends to enter directly in new geographical markets. By establishing subsidiaries that follow the startup model, REC seeks to increase revenues, lower risks concerning the regulatory environment and **reduce its dependency on external companies**.

INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

REC operates in the wide pharmaceutical market, an industry soaring at a rate between 4-7% during the 2016-2021 period (as per Technavio and Unicredit market research), for a total business worth ca. **€ 1.4tn in 2020**. REC's products focus mainly on Primary care, Specialty care and Rare Diseases - in which REC operates since 2007. (Please refer to Exhibit 1 for Revenue Breakdown). Most of REC treatments are available under prescription. Moreover, regarding primary and specialty care, REC operates especially in the niche-areas of cardiology and urology offering third-generation treatments. **Prescription drugs sales are expected to grow globally at a CAGR of 6% reaching \$1tn by 2020.** (Source: EvaluatePharma)

REC's geographical target differs depending on the product line: it markets treatments for Rare Diseases globally, mainly focusing on USA and Europe, whereas primary and specialty care products are mainly distributed in Europe and North Africa. This geographical diversification represents a competitive advantage as it mitigates potential country and individual markets risks. Please refer to appendix 3 for geographical CAGRs.

MACRO TRENDS:

- Ageing population.** By 2025 the world's population is expected to reach 8.2bn, with an increasing over-65 population due to extended life expectancy. **Elderlies** will account for 600 million people by 2019 and in Western Europe they will represent **21% of the population**.
- Increase of pharma consumption.** According to a study conducted by IMS Health, by 2020 **access to medicine will be wider**, with patients using 4.5 trillion medicine doses yearly, up by 24% from 2015. Estimates report that half of the population will consume more than one dose per day, while in 2005 only one-third of the population did so. Usage of medicines in Africa and Middle-Eastern countries will increase from 300bn to 500bn units in 2020. Drivers of this growth are better life-standards, increase in salaries, and completion of healthcare access expansion (especially in China and India).
- Change of life standards and proliferation of chronic diseases.** According to Deloitte's research, the life quality is improving in developing countries (middle class will account for 65% of the global population by 2030). This leads to an **increase of sedentary lifestyle triggered by eases that are the consequence of a wealthier lifestyle**. According to WHO, the population will be increasingly subject to obesity, diabetes and cardiovascular diseases in the future years.

INDUSTRY TRENDS:

- M&A:** Several factors are leading to a verticalization of the pharmaceutical sector and M&As are used to create synergies and to deal with scarcity of human and technological resources. Often R&D, considered an industry driver, becomes a financial hurdle for medium sized players, due to its high costs, without being a guarantee of success. Therefore medium-size companies rely on M&A and partnerships to face Big Pharma's competition. REC is heading in this direction as a strong buyer with a number of acquisitions, partnerships and license agreements over the years.

- **Value Based and Specialized Treatments - Claims of the Developed economies**
The common blockbuster strategy commonly pursued until 2005 has been recently replaced by **the focus on specialized treatments**. This transformation changed both the industry orientation and the reimbursement policies. Furthermore, it pushed **middle-sized pharma companies** to be active in niche segments focusing on specialized target, having the advantage of an incremental consumer base and a **favorable outlook from policymaker**.
- **More efficiency** prompted by development diagnostic in the diseases identification driven by **technological improvements**.
- **Wider use of genomics and genetics**: these disciplines have increased the possibility to develop personal cures and treatment doses. This is crucial for a business that focuses on specialty care and rare diseases such as REC. *Please refer to appendix 3 for details with respect to the therapeutic areas.*

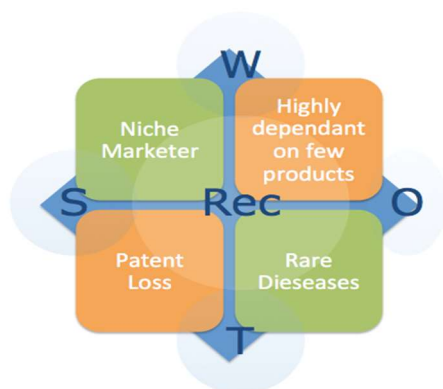
COMPETITIVE ANALYSIS

The competitive landscape of the pharmaceutical market is fragmented and multivariate. It differs widely according to geographical areas, pushing middle-size companies and smaller players such as REC to focus on niche-areas as they offer higher margins to lower volumes.

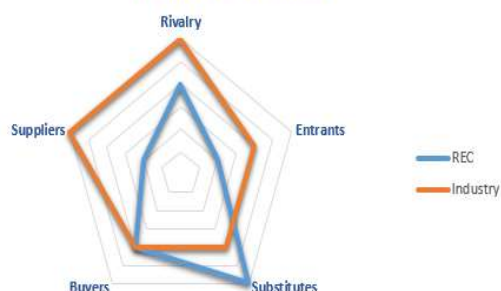
REC's competitive drivers underlie in the **broad portfolio of specialty pharmaceutical products in niche-therapeutic areas**. The success of REC is attributable to its focus on customer's needs and on geographical expansion through licensing. *(For further analysis please refer to the SWOT analysis in appendix 4)*

PORTER'S FIVE FORCES ANALYSIS

We consider a high level of competition in the pharma industry since the sector is consolidating among the Big Pharma companies, such as Roche, Novartis, Pfizer and Bayer. There is increasing evidence of this centralizing trend as the number of acquisitions pursued by such leader companies have increased over the past years. However, we claim that REC's position is protected by its proprietary rights and its focus on niche areas.



Porter's Five Forces



Intensity on Industry

Porter Forces Analysis

Intensity on REC

● ● ●	Internal Rivalry: High - Timely launch of products in the market might determine high profits for long periods after marketing approval. For REC there is a Moderate threat of substitution because on the one hand it operates in niche areas that are constantly increasing producers' interests, on the other hand patents limit competition for long time and at the moment REC is launching new products, which benefit from this protection. Moreover, being an in-licenser introduces the risk that the target acquisition might be made by other players.	● ●
● ●	Threat of Substitutes in the Industry: Moderate - OTC face competition from non pharmaceutical products that can substitute them but primary, specialty care and orphan drugs cannot be easily substituted, unless a better treatment is discovered. Patents are expiring quickly and generics' competition is encouraged by governmental policies, which favour them. Biopharmaceutical market is also increasingly growing. This sector is costly, complex and research are still restricted to few players. Threat of Substitute for REC: High : REC's experiencing a significant loss. Patent on the last lercanidipine product protected, Zanipress , has expired in 2016. This would imply an aggressive competition by generics which are considered to trigger a 30% loss in revenues.	● ● ●
● ●	Threat of New Entrants: Industry Moderate : The pharmaceutical industry tends to verticalize reducing the market share of its players through M&A, therefore competition is generally represented by bigger players as Big Pharma. Nonetheless the pharmaceutical industry is highly protected by entry barriers. REC: Low . As already mentioned, REC operates in niche and highly protected areas, the threat of new entrants is higher in the field of generics.	●
● ●	The demand is mostly inelastic for pharmaceutical industry. Reimbursement policies, which highly influence the business, are dependant on governmental decisions regarding healthcare spending. Hence, are mainly dependent on political decisions of different areas. REC: Moderate . REC's Rare Disease Business provides for vital drugs that face lower pressure on prices from the authorities since they are newly discovered treatment and diseases. Although, primary & specialty care in the European Area may be substituted by generics (due to lower prices), REC offers high quality drugs with little collateral effects.	● ●
● ● ●	Bargaining Power of Suppliers: High Thanks to the development of new technologies, it became easier to identify specific diseases. This might be costly procedure but they provide for fundamental instruments to produce successful cures. Due to the weakening of most emerging countries' currencies versus the U.S. dollar, those companies that import active pharmaceutical ingredients (APIs) face more hurdles. REC: Low . Suppliers have a lower pressure on REC's business because the Group produces its own active ingredients relying less on external players. Moreover, this risk is much higher for companies that purchase active ingredients in foreign currency due to the depreciation of many of these against the dollar.	●

FINANCIAL ANALYSIS



Sales grew by c.a. 67% during 2007-2015, driven by the **success of the Lercanidipine** products (30.2% of Sales in 2007) and the entrance in the Rare Diseases Market (2007). Furthermore, REC's recent acquisitions contributed to enlarge the group in terms of business portfolio and dimension. Despite a 6.6% CAGR in 2007-2015, the YoY growth rate was erratic because of the many acquisitions and patent expiration (the main one being Zanidip's in 2010).

Higher margins lead to higher roic- ROE increased over the years (from 9.1% in 2007 to 28.8% in 2015), above peers average (17.84%), driven by increased ROIC and by leverage effect. REC has been able to benefit from the synergies of the integrated subsidiaries (EBIT margin soared by 106% passing from 16.99% in 2007 to 35.12% in 2015). However, the increase in business dimensions resulted in a slightly lower efficiency, due to the premium paid for the control (Asset Turnover went down from 0.83x in 2007 to 0.71x in 2015).

- Rare diseases sales boasted higher margins** (44.7% according to the management), due to lower price pressure from governments and lower selling expenses, since a strong and capillary sales network is not needed.
- Synergies from successful acquisitions** led to COGS and operating expenses savings. This reinforces the hypothesis that REC consciously evaluates its M&A opportunities.
- Less Subsidiaries products:** 52% of revenues in 2007 were subsidiaries' local products sales, thus resulting in high costs. Currently, those account for 23.6% of total revenue, allowing for a more standardized production and, in turn, higher margins. REC is indeed consolidating the business with high-quality corporate specialized products (Livazo, Urorec, Orphan drugs) though maintaining a good grade of diversification, examples are the in-license of Cariprazine, treatment for schizophrenia.

Financial leverage effect - REC has increased the portion of Debt to Equity over the years (peak Gearing of 38% in 2013). Hence, part of the increased ROE is to be attributed to the leveraging of the company. Due to high reinvestment rate, we estimated a considerable **plunge in net Debt** (Payout ratio 0.6x 2016-2021E, as stated by management) and a strong cash generation over the next 5 year, thus leading the company to reach a **Gearing of 0.05x by 2021**.

Working capital management - REC has properly managed the **working capital** over the years (stabilizing it around a **8% of sales** from 2007 to 2015). The Cash Conversion Cycle has slightly risen due to higher average days of inventory (From 118 in 2007 to 213 in 2015). We believe this is attributable to the need of the company to provide promptly for some pharmaceuticals (such as orphan drugs) on the shortest notice after customers' need.

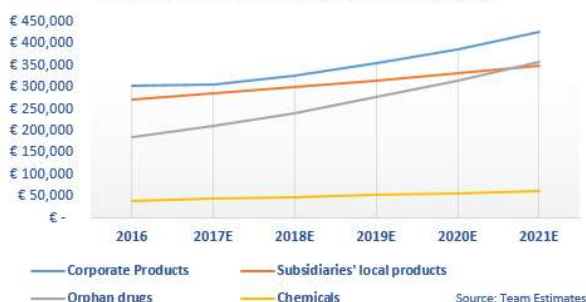
Cash flow generation - The company reached a FCFE ratio to EBIT close to 1 enabling shareholders' remuneration (Payout ratio 0.6x) and acquisitions financing, though maintaining a D/E ratio of around 0.25x. We forecast net debt to decrease until reaching a Net Cash position of 69,910 M€ in 2021, having room to leverage the company significantly.

FUTURE OUTLOOK

Sales growth by 9.6% CAGR 2016-2021 as result of our analysis on product features. Firstly, we have proceeded with the identification of the segments analyzing strengths and weaknesses of each product, thus assessing their growth potential.

- Corporate products** - Increase at a weighted average **CAGR of 7%** in the period 2016-2021 driven by 1. **Urorec** geographical **expansion** 2. stable trend of Lercanidipine's franchise although not protected by patent at present is still one of the leading and drug in the market 3. **Livazo** geographical expansion in Russia and Turkey 4. Strategic partnership with Richter for Cariprazine 4. Fortacin launch
- Subsidiaries local products** - We assume global market Cagr 5% at CAGR (IMS Health) as REC's strategy is not focused in boosting revenues deriving from these products, nor in investing in particular in some of them. REC is not concerned in improving performance of those products but rather in benefitting from the local markets.
- Rare Diseases** - 14% CAGR thanks to the consolidation of the spread of Carbaglu in the USA (declared by management 11th January 2017), the approval for the commercialization of Cystadrops and the introduction of Grasca (ALL expected for 2017 and ALM for 2018).
- Chemicals** - CAGR for pharmaceutical chemicals is 9% as related to growth of company's segments. (Further details provided in appendix 5).

Revenue Forecast by Products Category



Evolution of CCC



REC's Revenue Forecast



Ratios 2016	REC	Peer's avg
ROA	14.7	10.6
ROE	22.9	17.84
ROIC	20.3	15.22
Rev/Employee	0.27	0.34
Asset Turnover	0.72	0.65
Inv. Turnover	2.36	2.47
Net Margin	19.3	15.49
Operating Margin		21.56
Net Debt/Equity	25.02	10.37
EPS	1.14	2.26

Acquisitions - REC has been growing over the years not only organically but through acquisitions. The strategy of the management is to acquire businesses in the next 3 years in order to grow geographically in the markets they already operate. Hence, we consider acquisitions as part of the ordinary process and not as a mere option which effects and benefits are to be evaluated separately. We therefore expect an increasing capex (including acquisitions) of an average 9% of sales to be spent yearly. **Outcome** is: **(a) higher amount of intangibles:** license agreements and new patents and **(b) Increasing Goodwill** (from 453M up to 669M in 2021).

Margins - We expect EBITDA margin increments from 32.2% up to 39.7% and forecast a growth in Net profit margin up to 26%.

1. REC is expanding the business in the Rare Diseases segment (19.6% of revenue in 2021E), which has an operating margin of 44%, (Specialty and Primary 26%).

2. Geographical expansion through acquisitions will positively impact overheads: in particular Selling and G&A expenses (Selling margin down from 27.4% to 24% in 2021E, G&A down for 100bps) following the decreasing trend.

ROIC reaching 30.8% in 2021E - WC turnover up from 7.5x in 2015 to 8.5x in 2021 mainly as consequence of lower COGS. We do not expect relevant and material improvement in the WC management from the substantial viewpoint as: **(a)** inventory, as previously explained, cannot be managed with a better "just in time" approach due to the nature of the business and **(b)** days of payables and A/R are hardly manageable in the long run.

This will lead to a greater **IC turnover** (1.02x in 2016E to 1.15x in 2021) although there is substantial increase in Goodwill (Acquisition premium) which, together with profit margin growth, will positively affect ROIC, that is actually higher than peers trend (**Average 0.65x**).

Gearing potential - as REC is going to reach a **net cash position by 2020** (please refer to appendix 5 for further details), we believe there is potential to further increase Shareholders' return allocating the cash in profitable projects.

In million €	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016E	2017E	2018E	2019E	2020E	2021E
Net sales	628.4	689.6	747.5	728.1	762.0	828.3	941.6	987.4	1047.7	1153.9	1242.3	1361.2	1498.5	1652.1	1823.1
% YoY Growth	9.1%	9.7%	8.4%	-2.6%	4.7%	8.7%	13.7%	4.9%	6.1%	10.1%	7.7%	9.6%	10.1%	10.3%	10.3%
Gross Profit	441.3	486.6	533.9	511.0	521.2	551.1	634.2	699.2	745.9	835.8	911.9	1012.3	1128.9	1244.1	1372.3
Margin	70.2%	70.6%	71.4%	70.2%	68.4%	66.5%	67.3%	70.8%	71.2%	72.4%	73.4%	74.4%	75.3%	75.3%	75.3%
Selling margin	32.2%	31.1%	29.9%	29.7%	30.5%	30.3%	29.2%	28.7%	28.0%	27.4%	27.0%	26.0%	25.0%	24.0%	24.0%
G&A Margin	5.4%	5.7%	5.8%	6.0%	6.0%	5.5%	5.7%	5.8%	5.6%	5.6%	5.6%	4.6%	4.6%	4.6%	3.6%
R&D margin	7.8%	8.5%	9.3%	9.5%	7.3%	7.7%	7.9%	8.6%	7.3%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
EBITDA	156.2	174.1	197.0	181.7	187.7	191.7	230.2	273.8	317.0	371.0	407.6	486.9	565.5	639.5	723.4
Margin	24.9%	25.3%	26.4%	25.0%	24.6%	23.1%	24.4%	27.7%	30.3%	32.2%	32.8%	35.8%	37.7%	38.7%	39.7%
D&A	24.7	29.4	34.8	27.0	24.3	24.7	34.7	42.8	38.5	42.9	52.0	54.5	58.7	63.4	68.8
Financial Charge:	4.1	6.6	5.8	3.8	3.5	6.6	14.6	16.3	13.1	13.9	10.7	7.5	3.2	-1.8	-7.8
Tax rate	33.4%	27.3%	27.6%	28.1%	27.2%	26.1%	26.0%	24.9%	25.1%	25.8%	25.3%	25.4%	25.5%	25.4%	25.4%
Net Income	84.9	100.4	110.6	108.5	116.4	118.5	133.7	161.2	198.8	233.2	257.7	317.0	375.2	431.1	494.0
Net Margin	13.5%	14.6%	14.8%	14.9%	15.3%	14.3%	14.2%	16.3%	19.0%	20.4%	20.7%	23.0%	24.5%	25.3%	26.0%
ROE	21.73%	22.52%	21.73%	18.84%	19.58%	17.91%	19.05%	20.47%	22.85%	24.36%	24.44%	26.97%	28.44%	29.02%	29.45%
NOPLAT Margin	14.2%	15.5%	15.9%	15.4%	15.7%	15.1%	15.8%	18.0%	20.2%	21.4%	21.6%	23.8%	25.3%	26.0%	26.7%
IC Turnover	1.29	1.30	1.39	1.36	1.16	1.01	0.97	1.01	1.08	1.02	1.05	1.07	1.10	1.13	1.15
ROIC	18.23%	20.09%	22.10%	20.95%	18.21%	15.20%	15.31%	18.08%	21.86%	21.85%	22.59%	25.57%	27.83%	29.33%	30.78%
Roic ex Goodwill	35.9%	43.4%	49.9%	48.3%	40.7%	30.1%	28.9%	33.5%	40.4%	38.5%	40.0%	45.2%	48.9%	51.3%	53.5%
Gearing	0.25	19.5%	5.9%	-6.9%	10.7%	24.4%	38.1%	24.7%	11.4%	18.2%	12.7%	8.0%	3.1%	-1.5%	-5.8%
Spread	14.0%	12.5%	2.7%	30.4%	12.8%	11.1%	9.8%	9.7%	8.7%	13.8%	14.6%	17.6%	19.8%	21.3%	22.8%
WC turnover	7.00	8.24	9.39	11.35	9.02	6.99	7.48	6.81	7.53	8.25	8.34	8.43	8.52	8.52	8.52

VALUATION

We begin with a BUY recommendation forecasting a **year-end target price of € 34.80**, which represents a **16% upside** (as of 28th February 2017).

Due to the small dimensions of Recordati and the nature of the business the company operates in, **there is low correlation between REC's performance and the market's**. On the other hand, there is a reliable underlying financial relationship between the pharmaceutical business and growth, profitability and cash flow generation. Therefore, our target price is obtained for **80% from the discounted cash flow method**. Then, as a check, we performed a **multiple analysis (accounting for 10% of the target price)** with the aim of comparing our DCF results with industry average outcomes. As a further check, we also considered **CFROI model (accounting for 10% of the target price)**.

DCF ANALYSIS

Considering that pharma industry changes very fast, we are not able to reliably predict the outcomes in the long run. Therefore, we used a **five-year DCF model**, forecasting REC's free cash flow up to 2021. Afterwards, through the terminal growth method, we calculated the terminal value, considering a **2% growth rate to be conservative and to avoid overestimation**.

FCF	Discount rate	PV
210,564 €	0.94	197,971
242,680 €	0.88	214,520
286,558 €	0.83	238,157
324,655 €	0.78	253,682
369,379 €	0.73	271,367
Total Present Value		1,175,698
Terminal Value		6,346,836
Enterprise Value		7,522,534
Net debt		50,089
Market Value		7,472,445
Outstanding shares		209,125
Target Price		€35.73

WACC - We calculated the Cost of Equity using the **CAPM model and the Cost of Debt through a valuation of the current outstanding debt of REC**. Beta was calculated using a bottom-up approach, since a direct beta was not sufficiently reliable. *Please refer to appendix 8 for further explanation.*

WACC = 6,36%		
Risk-Free Rate (Rf)	2.41%	We took weighted average yields of PD, SP, IT, FR, GER, TU, US, RUS 10-years government bonds, according to geographical revenue breakdown provided by financial statements data.
Market Risk Premium (MRP)	5.60%	Obtained from Fernandez survey on MRP, used in 2016 by analysts, finance professors and managers in Italy (last update: May 6 2016).
Beta (B)	0.742	Beta estimation based on peers' analysis as 3Y regression on stocks (weekly) is not fully reliable.
Cost of Equity (CoE)	6.56%	Capital Asset Pricing Model (CAPM): $CoE = Rf + B * MRP$
Cost of Debt (CoD)	2.88%	Grand debt outstanding weighted according to the loans granted to Recordati S.p.A. and other group's companies.
Tax rate	25.0%	Effective marginal tax rate of REC's future performance.

A DCF performed with the calculated WACC leads to a target price of €35.73 (upside of 25% as of 28th February 2017). A sensitivity analysis was performed to analyze the impact of WACC and Terminal growth rate changes in share prices. *(Please refer to appendix 9)*

MULTIPLES VALUATION

Multiples valuation has been performed with the objective of comparing the results given by the DCF method against average industry results.

- **Peers' selection** - Competitors were chosen considering proxies of growth and profitability, i.e. size, geographical exposure, ROA and ROIC. Yet, we must point out that none of the selected peers perfectly matches REC business model, due to its ad hoc business model connected to the operating segments and to its strategic geographical exposition. *(Please refer to appendix 10 for further explanation).*
- **Multiples Selection** - Our valuation has been based on two enterprise value multiples EV/EBITDA and EV/EBIT and on two share price multiples: **P/E** and **PEG** to see how much the market is paying for the growth expectations about REC. We took both EV/EBITDA and EV/EBIT to mitigate differences in operating assets structure of the comparables, though active in the same industry.
 - **Price/Earnings:** at the moment, REC trades at a 22.9x 1YF P/E, having a 2% premium on its selected competitors (22.5x).
 - **PEG ratio:** REC PEG ratio is 1.8x, meaning that REC has a 4% premium on the selected peers.
 - **EV/EBITDA:** today's 1YF EV/EBITDA of REC is 15.3x, having just a 0.45% premium on the mean value of its competitors (14.7x).
 - **EV/EBIT:** contrarily to the previous ratios, REC 1YF EV/EBIT is 17.1x, a 6% discount with respect to its peers' average.

Giving the same weight to all the selected multiples, **we obtain a target price of EUR 29.16 (downside 2.5%).** As previously mentioned, no competitors matches completely with REC, and that is the main reason why the target price obtained with multiples moves away from the result obtained with DCF, which also takes into consideration synergies from future acquisitions and value added lying inside of REC.

Standard Multiples Evaluation		
Target Price	Forward 1y	Forward 3y ave
EV/EBITDA	30.23 €	31.22 €
P/E	28.50 €	31.78 €
PEG Ratio	24.98 €	24.98 €
EV/EBIT	32.92 €	33.69 €
AVERAGE	29.16 €	30.42 €

CFROI VALUATION		
Warranted Valuation	(MM)	Per Share
+ PV Cash Flow Existing Assets	2412	11.62
+ NPV Cash Flow Future Investments	4238	20.43
+ Market Value of Investments	32	0.16
Total Economic Value (EV)	6683	32.20
- Market Value of Debt & Equivalents	367	1.77
- Market Value of Minority Interest	1	0
Partial Year Adjustment	530	2.56
Warranted Equity Value	6845	32.99
Shares Outstanding	209	

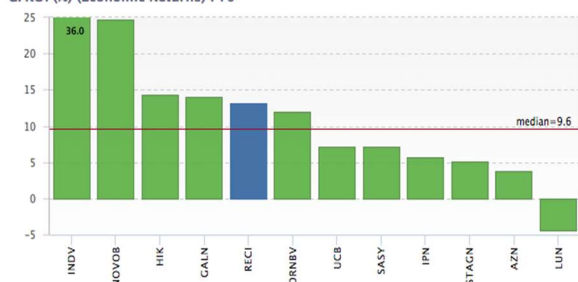
DISCOUNTED CFROI

We are including in our valuation the CFROI model which uses as forecast the CFROI Return, equal to the Gross Cash flow to Gross Invested capital ratio.

We believe valuation has a **number of advantages over the DCF model:**

1. **Excess cash** - Healthcare sector, in which REC operates, has large amounts of cash exceeding its operating needs. (Net cash in 2020 and 2021, team estimates) Invested capital is gross of this amount, therefore Cash is considered a normal asset, as well as Plant, a Patent or a License right.
2. **Non-Depreciated Assets** - Gross investment taken into consideration: no accumulated depreciation, to eliminate discrepancies among new assets and therefore innovating firms and aged assets.
3. **Inflation adjusted Book Value of assets:** return is calculated at current prices while Book value of assets tend to be lower as it reflects the historical cost paid to purchase it
4. **R&D added back** to Gross Cash Flow as considered future cash-flow generating assets.

CFROI (%) (Economic Returns) FY0



Projection - As well as for the DCF, we made estimations about asset turns, sales growth and margins until 2021; from 2022 on, we assume fade rate of 5%. That is, rate at which CFROI will decrease after 2021E every year.

Valuation - At present, Recordati is performing above the peers' median at a **13.22 CFROI**, which reinforces our investment recommendation suggesting that Recordati is currently investing capital well and is creating value for the shareholders. The Target price obtained of **32.99%** has a **10.3% upside** as of 28th February due to the fact that, Invested capital is on one hand increased with the capitalization of R&D, cash and accumulated depreciation; but on the other hand, Cash flow is gross of special items after tax (R&D D&A, Rent, Interest, Pension Adjustments, Lifo charges).

RISKS

INDUSTRY RISKS

- **Legislation and Regulation** - The European market, the main source of REC's revenues (78.8% of 2015 revenue), is going to grow at a slower rate as governments seek to substitute proprietary drugs with the equivalent generic to reduce public expenditure. To overcome this threat, REC is expanding its business in the so called *pharmerging* markets (South America, Far East).

- **Generics competition and price erosion:** Generics tend to be preferred because of their lower price and similar outcome on patients. This would however impact only the specialty care segment, whereas the rare diseases market shows very little price and competition pressure.

- **Risks connected to Launch of New Product:** 1. bureaucratic barriers may cause a delayed launch of new products (last one for Graspia in 2016). 2. Trials could result in a failure until the last phase. 3. A competitor might launch a molecule better or earlier than REC's. Other negative implications might be research leading to negative results, failure to receive marketing approval or lower reimbursement policies.

- **Market Competition:** Being REC a mid-size firm it might be subject to competition by bigger firms that have a greater and more robust sales network. However, REC's target of a niche market share hedged this risk.

FINANCIAL RISKS

- **Credit Risk:** REC issues private bonds and has low D/E with respect to its peers. The fact that it operates regularly worldwide and in different regions and through a broad network is increasing the risk of default by its partners since it is increasingly dealing with troublesome regions. Nevertheless, DSO decreased from 166 to 159 meaning that quality of sales slightly increased.

- **Interest rate:** Fluctuation in the market may affect the group's interest expense. However, geographical diversification in several countries implies that the group is mitigating the risk and mainly engages with medium and long-term fixed interest loans. Furthermore, the company covered the risk with interest swaps. Only a relative small portion of debt may be subject to growing or variable interest rates. Nonetheless, the risk is mitigated by the fact that the company is going to reach a Net cash position (+79,866€ M) by 2021.

- **Operational Risk:** REC, according to its consolidated bolt-on acquisition strategy, is likely leading M&A with a 3time multiple sales business in the following years, as the management reported in the last conference call. Failure in accomplishing this process might not result in cost savings, thus leading to a failure in amortizing the purchase cost and becoming value destroying.

- **Foreign Currency Risk:** The company is exposed to an increase in assets denominated in foreign currency, thus facing risks related to foreign currency volatility. In particular: the Turkish lira has been depreciating by 29.2% over 2016 and Turkey faces low country ratings. Russian Ruble has been depreciating by 20% over 2016 though it has been showing increasing trends over the past years. To overcome such problem REC tries to have both sales and expenses in the foreign currency.

INVESTMENT RISKS

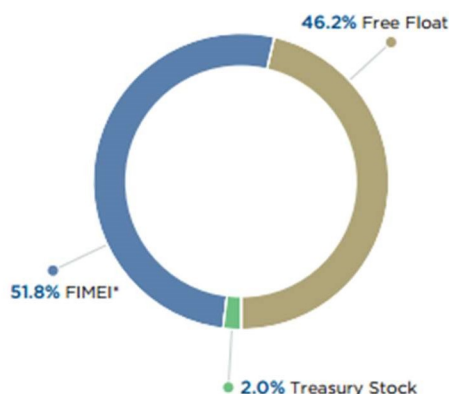
- **Change in Management:** We consider that the change in the managerial structure might entail risks in the long run. Even though the new CEO is historically inserted in the firm and has a certain expertise with the business, there might be a lack of technical knowledge related to the most scientific themes. *Please refer to appendix 14 for a further analysis on management's knowledge and competences.*
- **Family ownership and strong involvement:** business interactions may be more complicated when family roles blend or clash with business roles. The filling of management roles by members of the Recordati family may create confusion. Moreover, REC's management may lack of impartiality.
- **Conflict of interest:** it may occur whenever the Recordati family (the majority shareholder) gains benefits from sale or purchase of company assets that a member of the family directly controls.

OTHER HEADINGS

CORPORATE GOVERNANCE

REC complies with the current Corporate Governance (CG) Code developed for listed companies in Italy. The governance structure is based on a conventional organization model which comprises a Board of Directors and a Board of statutory Auditors.

REC's Shareholding



* FIMEI is 100% owned by the Recordati family

Source: Company reports

- **Shareholders' base** - REC has, as of February 2016, 209,125,156 outstanding ordinary shares with a nominal value of €0.125; no other categories of shares or financial instruments giving the right to subscribe to new share issues have been issued this year. Each share gives equal voting right and is freely tradeable.
- **The major shareholder is the Recordati family**, which owns 51.791% of the shares (and of the voting rights) through FIMEI s.p.a, a limited liability private company. Such ownership position is very strong as the second owner for number of shares holds 3.395% of the shares. However, REC is not subject to management and coordination by FIMEI spa, since FIMEI is a mere financial holding company with no operations of any kind.
- **Board of Directors (BoD)** The BoD is currently composed by eight directors, of which five independent, including two women (*please refer to appendix 14 for a comprehensive overview of each director's background and role*). Having being appointed in 2014, the BoD will conclude its term of office at the time of the Shareholders' meeting which will be held to approve the 2016 Annual Report.
- **Two committees have been created:** the **Remuneration Committee** - which is in charge of proposing the remuneration policy - and the **Audit and Risk Committee** - which provides consultancy and makes proposals to the BoD concerning the internal control and risk management system.

Zoom on: Remuneration Policy -The scheme is based on **a fixed remuneration and two variable components:** **a)** one variable targets the medium term, **b)** the other relates to the longer run in relation with the stock price. In the short period, MBO (Management by objective) consists of 3 objectives that, if achieved, account for 30% of gross annual salary as a maximum ceiling. This maneuver has the aim to align management objectives to the maximization of the group's value. Additionally, the group adopts an operative management margin (*marginale operativo gestionale di gruppo*) that requires an auto-financing of the project for the managers.

To calibrate medium to long term variable remuneration there is a stock option system, with options being granted on a 2-year basis.

Management - Following the departure of Giovanni Recordati, former Chairman and CEO of the company, a new managerial asset has been put in place. Today the two roles are separated, with Andrea Recordati as CEO and Alberto Recordati as Chairman.

The **top management team**, composed of 17 members, averages more than 20 years of experience either with Recordati or with the pharmaceutical industry, guaranteeing a combination of knowledge and expertise that has proved a major asset for REC over the past years. (*Please refer to appendix 14 for overview of management's knowledge and expertise*).

CSR

The group engages in several activities that prove it's **a) Philanthropic** commitment within the society. The main contribution that REC's offer to **scientific** researcher is **the Arrigo Recordati's international prize**, established since 2000, which is worth 100,000 €. The 9th edition is held in 2017 and entitled "Biological Therapies for the Treatment of Diseases and Conditions with High Cardiovascular Risk". The entire **Recordati Group** backs several associations (*The list can be found in the Appendix*) dedicated to support sick people as well as associations improving research development and cultural improvement. **B)** Recordati shows an extremely accessible information that fully responds to the principles of transparency, completeness and confidentiality since it is a listed company. REC adopted is **Ethical Code in 2002** and kept amending it. The main value onto which the group relies are "Safeguarding the individual, Fairness and equality, Ethically proper and legally compliant conduct, Loyalty, Confidentiality of information, Respect for the interests of all parties, Professionalism, Protecting the health of individuals and the environment". **C) Economically speaking** REC enhances value minority representation in its group. 2 women are member of the board, 5 members are independent and one of the directors is appointed from the minority through the adoption of slate voting.



APPENDIX

Table of Contents

1. BUSINESS DESCRIPTION	2
A. Corporate Products	2
B. Orphan Drugs	2
C. Main rare diseases treatments	2
D. Pharmaceutical – OTC and Subsidiaries’ local products	2
E. Pharmaceutical Chemicals	3
2. M&A DRIVEN	3
3. INDUSTRY ANALYSIS AND COMPETITIVE POSITIONING	4
A. Analysis of products’ categories and geographical development	4
B. Industry trends - therapeutic areas	4
4. SWOT ANALYSIS	5
5. REVENUE FORECAST	6
A. Revenue forecast by product category	7
6. PIPELINE AND ITS POTENTIAL	9
7. FINANCIAL ANALYSIS	9
8. WACC COMPUTATION	11
9. DCF MODEL	13
10. PEERS SELECTION	14
11. MULTIPLE VALUATION	15
12. HOLT - CFROI	17
13. RISK MATRIX	19
14. CORPORATE GOVERNANCE	20

1. BUSINESS DESCRIPTION

The Pharmaceutical segment offers prescription and over-the-counter (OTC) products, mainly focusing on primary and specialty care and drugs for rare diseases.

Pharmaceutical sales accounted for € 1,103.1 million in 2016 (96.5% of total revenue)

A. Corporate Products

Concerning the core products, REC's portfolio's focus is in the cardiovascular and urology areas, where the most profitable drugs (under prescription) are Zanidip (9.9% of total revenues in 2016, decline in sales due to patent expiration in 2010), ZaniPress (6.0% in 2016), Urorec (7.4% in 2016) and Livazo (3.0% in 2016). The group's pharmaceutical business is carried out in the main European and international markets through subsidiaries and licensing agreements with high standing pharmaceutical companies.

- **Zanidip (lercanidipine)**: an antihypertensive (blood pressure lowering) drug, belonging to the dihydropyridine class of calcium channel blockers, which works by relaxing and opening the blood vessels thus allowing blood to circulate more freely. ZaniPress is marketed in Europe, North Africa and China also thanks to the licensing-out agreements. The patent protection for ZaniPress expired in 2010.
- **ZaniPress (lercanidipine+enalapril)**: this combination of molecules may be prescribed for treating hypertension cases inadequately controlled by either lercanidipine or enalapril alone. As for ZaniPress, ZaniPress is available in numerous countries in Europe and North Africa. Patent protection in Europe expired in 2016, but in Spain and Portugal generics pressure already started in 2013.
- **Urorec (silodosin)**: is a medication for the symptomatic treatment of benign prostatic hyperplasia. It acts as a α_1 -adrenoceptor antagonist with high uroselectivity (selectivity for the prostate). Urorec has been launched in 34 markets and it detains 10% of the market share of the BPH (Benign Prostatic Hyperplasia) market in 17 countries.
- **Livazo (pitavastatin)**: statine developed by Kowa Pharmaceutical Europe, for which REC has a license-in agreements, used to treat dyslipidemia and high cholesterol. Livazo is currently distributed in 6 markets (Georgia, Germany, Netherlands, Portugal, Spain, and Switzerland) and it detains a market share of 7.5% in 4 countries. Livazo is expected to be launched in Russia and Turkey starting from 2017.
- **Fortacin (lidocaine/prilocaine)**: innovative treatment (to be launched in 2017) available in spray form for the cure of premature ejaculation. It has been developed by Plethora Solutions Ltd. and REC has obtained the license for its distribution in Europe, Russia, CIS, Turkey and North Africa.
- **Reagila (cariprazine)**: obtained through a license-in agreement signed with Gedeon Richter in 2016, Reagila is an antipsychotic for treatment of bipolar disorders and schizophrenia. REC has obtained the distribution rights in Western Europe, Turkey, Algeria and Tunisia. With this product REC will break into the market of nervous system disorders. Approval is expected in 2017, with launch in 2018.

B. Orphan Drugs

REC is worldwide active in the rare disease segment through two dedicated subsidiaries: in the European area it operates through Orphan Europe while in the NORAM region it relies on Recordati Rare Diseases (established in 2013). Orphan drugs¹ are offered for the treatment of rare diseases across Europe, in the Middle East and in the NORAM region. Sales of orphan drugs totaled € 168.6 mn in 2016, reporting an increase of +26.1% due to high business performance and foreign exchange effect following the revaluation of the U.S. dollar. REC's rare diseases business is especially focused in the U.S.A (total volume \$ 113 bn in 2016 globally, +23.2%; 16.4% of the total prescription drug market), where Recordati is expanding its research in metabolic diseases and neonatology, Cystadrops (ocular cystinosis) and Grasp (ALL and AML, phase II b). REC's success in the treatment of rare diseases led to the establishment of dedicated companies in Brazil, Mexico and Colombia, boosting its key presence in the market.

C. Main rare diseases treatments

- **Carbaglu (carglumic acid)**: is a synthetic form of N-acetylglutamate (NAG), a chemical compound the human body needs to start the process of removing excess ammonia (a waste product generated during the breakdown of proteins). High levels of ammonia are toxic for the body. Carbaglu helps to relieve symptoms by lowering high ammonia levels in people with NAGS deficiency. CARBAGLU is the only FDA-approved therapy for the treatment of high ammonia levels due to NAGS deficiency. The management has declared its intention to exploit the potential of Carbaglu in the USA from 2017 to 2019.
- **Cystadrops**: eye drop solution to treat corneal cystine crystal deposits in adults and children with cystinosis. The commercialization of Cystadrops has been approved on Jan. 27th 2017. The direct competitor of this product is Cystadran, developed by Sigma Tau (still not available in Europe), however Cystadrops is believed to have a better posology and to be more functional.
- **Grasp (eryaspase)**: orphan drug developed by Erytech for the treatment of acute lymphoblastic leukemia (ALL) - to be launched in 2017- and acute myeloid leukemia (ALM) - launch in 2018, for which REC has obtained distribution rights in Europe. Grasp is considered a third generation treatment, since it minimizes the collateral effects of the previous available treatments (Erwinase) (Erytech document of reference).

REC has in its pipeline new rare diseases products:

- Phase I/II treatment for acute decompensation episodes in MSUD (Maple Syrup Urine Disease);
- REC 0438, a nociception analogue (Phase I/II in EU), to be advanced with the objective of treating urinary incontinence in pediatric patients suffering from spina bifida.

D. Pharmaceutical – OTC and Subsidiaries' local products

¹ Scarcity of know-how/expertise and limited number of patients imply that a rare disease is not adopted by the pharma industry and hence the expression "Orphan Drugs".

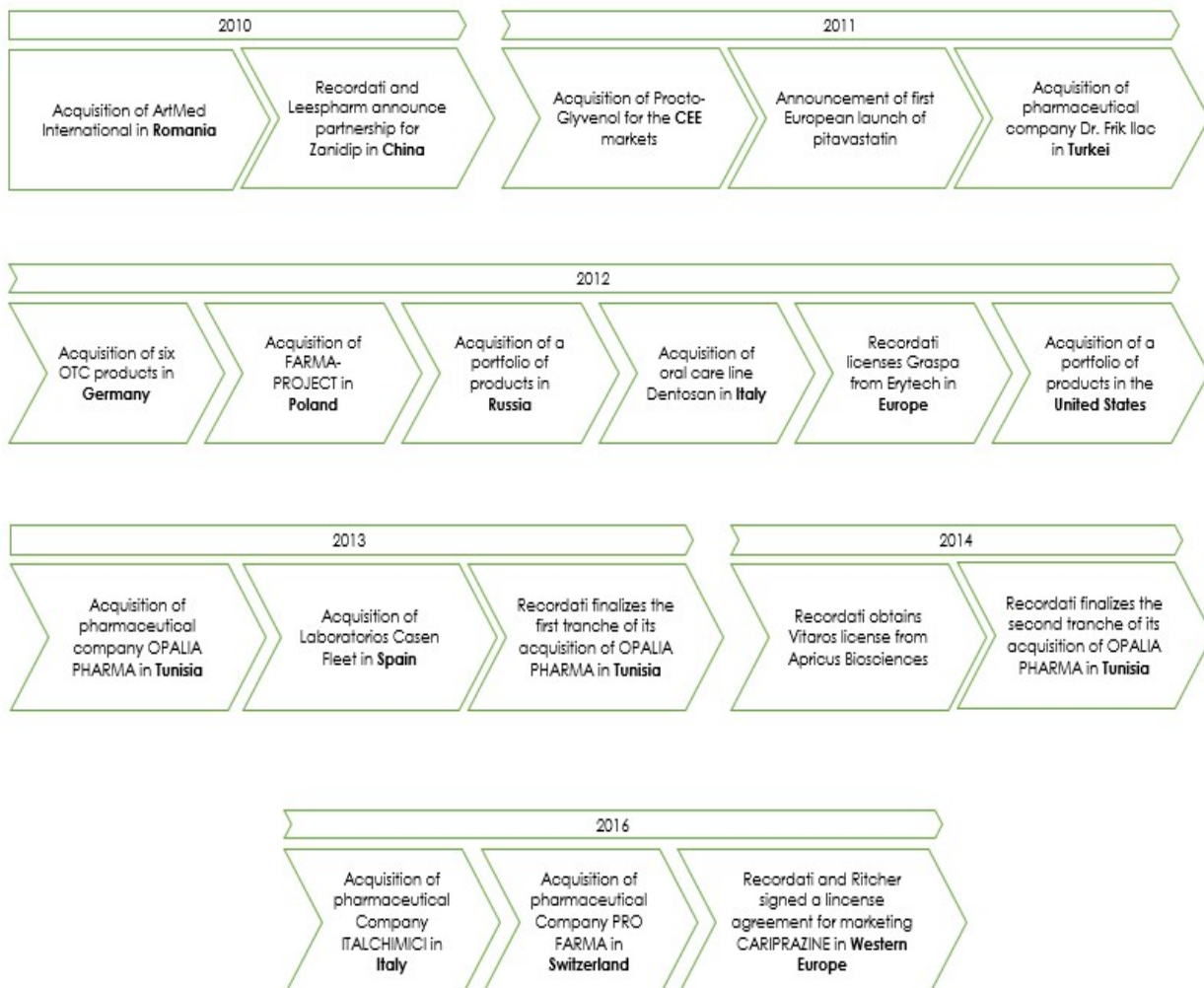
Currently most OTC brands are marketed in single countries (France, Italy, Spain, Germany, Romania, and Portugal). REC's objective is to make this segment grow at a double digit CAGR in the next years thanks to further strategic acquisitions. The term "subsidiaries' local products" indicates the established product line developed and marketed by REC's subsidiaries before their fusion with the Group (methadone in France, Peptazol, Cardicor and Entact in Italy, and Ortoton in Germany). Those products are available in the countries in which the subsidiary markets them and has marketed them before the acquisition.

E. Pharmaceutical Chemicals

REC's pharmaceutical chemicals business focuses on satisfying the requirements of the pharmaceutical business, guaranteeing safety of production process and environment protection, and on strengthening its presence in highly regulated markets (especially U.S, Europe and Japan). In this segment REC produces active ingredients and intermediates for the pharmaceutical industry. It boasts two pharmaceutical chemical plants and six sites for pharmaceutical production, located in Italy, Spain, France, Turkey, Tunisia and Czech Republic. The Turkish subsidiary has started an important investment program for the construction of a new production plant, which was declared GMP compliant

2.M&A DRIVEN

REC has relied heavily on M&As over the past years to lead its global expansion. These aimed at a geographical expansion as well as at an increase in pipeline products and know-how. Currently, REC has 26 subsidiaries. In 2000 there was the acquisition of ArtMed International in Romania, Bouchara in France and a partnership with Leespharm to market lercanidipine in China. In 2005 REC established a subsidiary in Germany and one in Greece and, in the same year, it acquired Jaba's Pharmaceutical Group, located in Portugal. In 2007 REC acquired Orphan Europe, thus entering the market of rare diseases - a turning point for the firm. At the same time it entered also in the Turkish market through the acquisition of Yeni Ilac. In the following year REC acquired Herbaco-Bofarma based in Czech Republic. In 2011 REC acquired marketing authorization for Procto-Glyvenol in the CEE area and Dr. Frik Ilac in Turkey. In the following years REC conducted several product acquisitions in Europe and a portfolio in the United States. Considerable was the acquisition of Opalia Pharma in Tunisia, finalized in 2014. In 2016, REC acquired ITALCHIMICI, PRO Pharma in Switzerland and signed a licensing agreement with Ritcher to market Cariprazine in Western Europe.



3.INDUSTRY ANALYSIS AND COMPETITIVE POSITIONING

A. Analysis of products' categories and geographical development

Generics: By 2020 they will account for 35% of the whole pharmaceutical market. In *pharmerging* markets generics will represent 52% of the drug spending, while in the developed countries it will account for one-third of the total sales. Generics tend to be preferred because of their lower price.

OTC: According to AESGP, in the European market OTC accounted for €33bn of sales in 2015. Its growth is globally projected to reach \$ 162bn by 2020 (Technavio). Latin America and Asia are the leading regions with a CAGR of c.a. 10%. OTCs have an increased visibility because they can be subjects of marketing campaigns and can produce higher volumes; moreover, they do not require either prescription or a trained salesforce. This business, characterized by a less stringent regulation, faces a number of threats: a) wider quantity of players, b) easily subject to counterfeiting, c) stiff competition from non-pharmaceutical substitute products.

Primary Care: Primary Care industry is increasing due to the demand pressure of self-centered medications and chronic diseases as well as increment in disposable income.

Specialty Care: here the drugs are often initiated by a specialist and distributed only by designated sellers. This segment has seen its growth thanks to its customer-centric market vision. This has driven consumers' expectations towards better quality and specifically narrowed cures. In Europe the specialty care segment will account for 90% of total spending by 2020 and in the United States it will account for 50% of total sales. They will continue to be more significant in developed markets.

In terms of geography, the American market will still represent the broadest market. This hub's volumes would rise to \$570 bn by 2020 but its 2.6% CAGR will be among the lowest with respect to other regions. China will be the second largest pool, being worth \$170 bn. Overall the Asia Pacific Region will ramp at 6.1% CAGR. Drivers of the global growth will be the BRIC countries, whose trends are the following: Brazil (9-12% CAGR), Russia (11-14% CAGR), India (5-8% CAGR) and China (6-9% CAGR). Eastern Europe will experience a rampant increase at 4.7% CAGR. Similarly, Africa is projected to grow at a 4.1% CAGR. Western Europe will be the slowest in terms of growth, with a CAGR of 1.8%.

(source: KPMG, Oxford Economics).

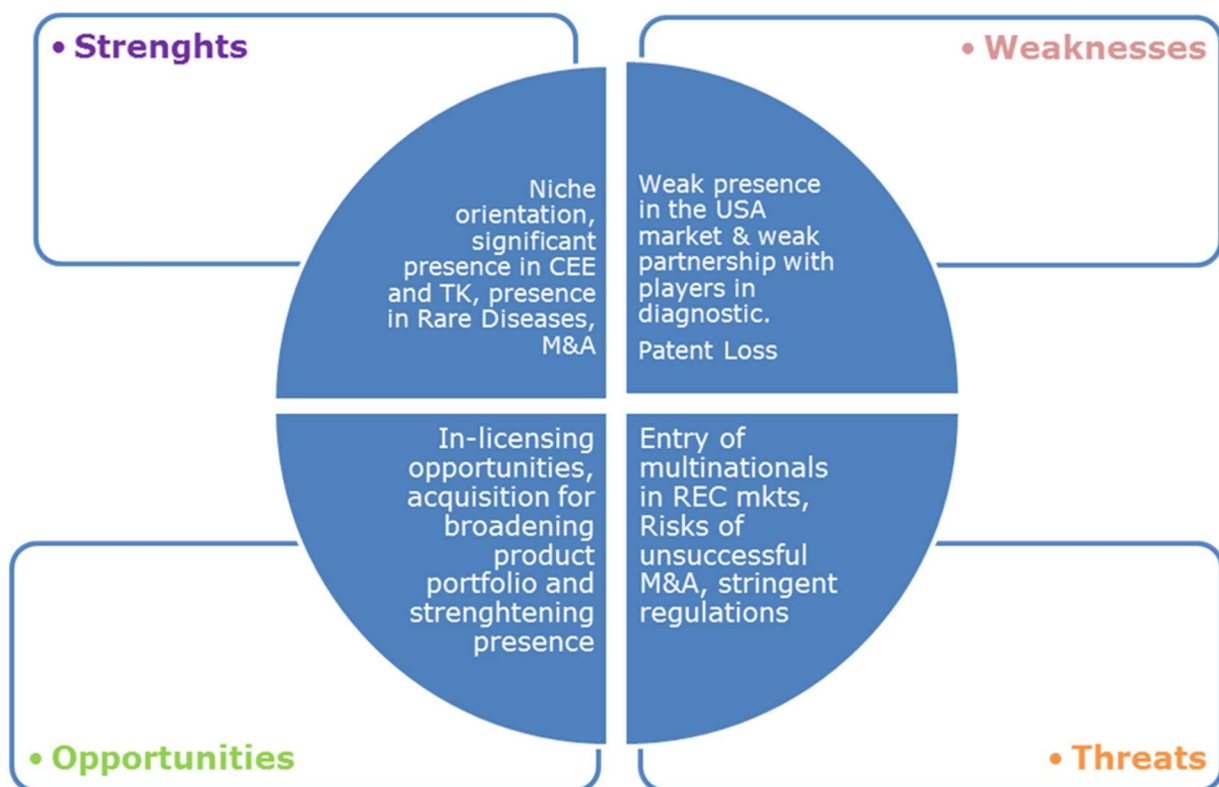
B. Industry trends - therapeutic areas

1. **Oncology** is the main development area as it is forecasted to have a 12.5% CAGR (\$190bn business by 2020). REC has in its pipeline a ready-to-be-launched product, **Graspa**. It targets an orphan form of acute leukemia, myeloid and lymphoblastic, which is among the main targets of FDA approval in the next years for orphan drugs.
2. **Neurology:** expected to be an important therapeutic area in Europe. Researches project a 6.9% CAGR and a value of \$18.3 bn by 2020. The market is dominated by top players, which control 60% of the market, that threat to leverage on already developed know-how, resources and distribution channels. However, REC was approved a marketing license for **cariprazine** in the European market in 2017, while the one for the American market was granted to VRAYLAR.
3. **Antihypertensive** are globally growing at a relatively slow rate (+0.4% CAGR) and their market share in the Pharma market is shrinking by 1p.p. Nonetheless, this might correspond to slow reinforcement of REC in this business, as its patents are expiring and it would be growing slowly in the next years.
4. **Urology:** According to Aboutpharma, the urological cancers market, including bladder, kidney, prostate and testicular cancer, will increase from \$17.9 billion in 2015 to \$35.9 billion in 2022, at a substantial compound annual growth rate of 10.39%.
5. **Rare Diseases:** Currently, only 7000 rare diseases are known and 50% of the affected population is composed of children. Since its kick-off in 2005 it turned into a profitable and soaring market that targets an extremely restricted population. Many affected people are unaware of their condition, therefore identification is extremely difficult. According to the National Institute of Health Office of Rare Disease Research, 6% of the inquiries are related to undiagnosed diseases. Kakkis EveryLife Foundation reports that 95% of orphan diseases have no treatment approved by FDA yet, justifying the growing interest in this sector. By 2020 the Rare Diseases business is estimated to reach \$178 bn and to enhance a greater number of regulatory approvals. This business segment requires a highly trained workforce that involves doctors and specialists. Moreover, 80% of these diseases are genetic and remain throughout people's lives.

Top 15 players have 54,1% of the global Market Share of the prescription and OTC markets (\$776bn in 2015) and, according to EvaluatePharma estimates, they are projected to maintain such position, reaching 54,6% in 2022. The remaining percentage is divided among thousands of different players.

4.SWOT ANALYSIS

Strengths	1. Niche orientation: REC offers a wide range of innovative pharmaceuticals, both proprietary and under license, in a number of therapeutic areas. The company's strongest products are drugs for treatments of hypertension and other cardiovascular disorders, as well as disorders in the lower urinary tract. A broad portfolio helps REC in meeting the unmet needs of its customers' base. 2. Significant presence in CEE and Turkish markets: as multinational pharmaceutical companies are addressing CEE markets to strengthen and drive their revenue growths, REC's consolidated presence in these markets makes it the partner of choice for those multinationals active in the aforementioned regions. Moreover, it was considered among the ten top player in the Turkish market 3. Presence in Rare Diseases segment with outstanding results: this segment, does not only enrich REC's portfolio, it also offers better revenues due to its high marginality with low volumes. REC was awarded a Corporate Excellence Award 2016 sponsored by Gea and Harvard business review Italy for quality of its treatments of Rare Diseases in 2016 as well as a prize for Innovation and Technology. In this branch REC is targeting neonatal rare diseases, which is a growing business. 4. Consolidated M&A practices and low R&D costs hedged through acquisitions.
Weaknesses	1. Weak presence in the USA market: REC has a limited presence in the USA, where it delivers just Rare Diseases treatments. Therefore, this limited presence may limit REC's top-line growth. 2. Weak Partnership with players in diagnostic: along with a growing business in Rare Diseases it should be fundamental to have partners in this area.
Opportunities	1. In-licensing agreements and acquisitions for broadening products' portfolio and strengthening in Pharmerging countries and the US: this is the case for Fortacin (agreement with Plethora Solutions), Grasca (agreement with Erytech) and Cariprazine (agreement with Geodon Richter). All those agreements, are likely to strengthen REC's competitive position and to help the Group meeting its customers' needs. Moreover, in-licensing agreements reduce risks connected to the failure of R&D. With regards to M&A, REC for instance bought Opalia Pharma, a Tunisian-based pharmaceutical company, this acquisition represent a strategic platform for REC to establish its presence in North Africa with the objective to expand in Central Africa and in the Gulf States.
Threats	1. Entry of multinationals in the markets in which REC operates: the entry of multinational companies in the niche-markets in which REC operates may intensify the competitive pressure, meaning that REC may lose its market share. 2. Acquisitions are a risky factor despite REC's expertise 3. Stringent Regulations: the pharmaceutical market is extremely influenced by governments regulations, especially with regards to pricing in the field of high demands products. Therefore, there is always the risk that governments impose restrictions on pharmaceutical industry and mainly in Europe. This could affect REC's growth in the markets in which it operated.



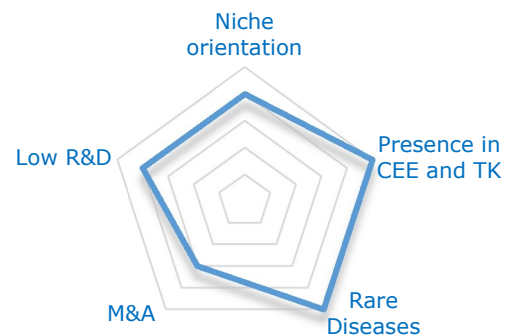
Strenghts	
Niche orientation	4
Presence in CEE and TK	5
Rare Diseases	5
M&A	3
Low R&D	4
AVERAGE	4.2

Weaknesses	
Weak Presence in USA	3
Weak partnership	2.5
AVERAGE	2.75

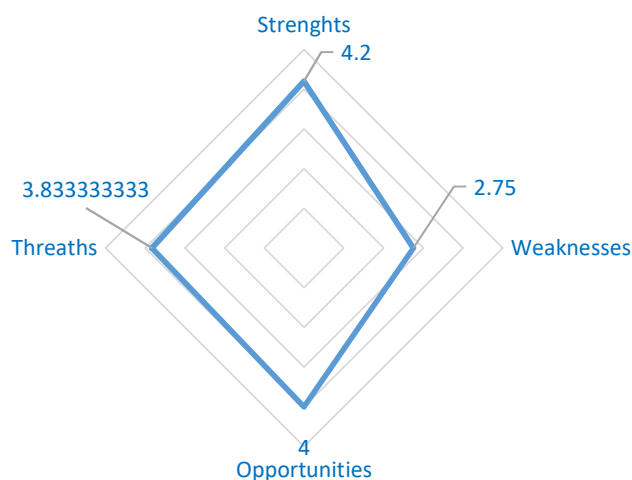
Opportunities	
In-licensing agreements	4
Acquisitions	4
AVERAGE	4

Threaths	
Entry of Multinationals	5
M&A risks	3
Stringent regulations	3.5
AVERAGE	3.83333

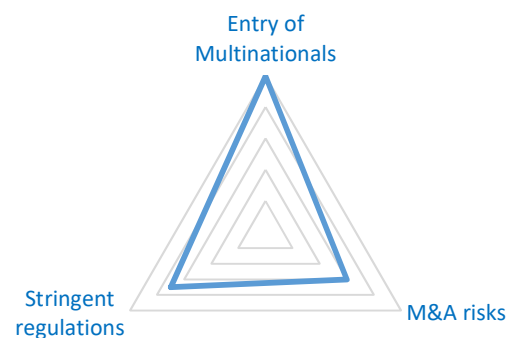
Strenghts Ratings



SWOT Evaluation



Threats Ratings



5.REVENUE FORECAST

We expect revenues to reach **EUR 1,242.3M in 2017E**, with an **increase of 7.66%** with respect to 2016. Revenues are estimated to increase continuously in the long run, as happened in the previous years (CAGR 2007-2015 6.6%). This consolidated, steady, and positive trend is due to: 1) **consolidation of REC's presence** in the markets where it is already operating (this is double confirmed by the strategy REC will pursue from 2017 to 2019), 2) **broadening of products portfolio and introduction of innovative drugs**, such as Fortacin (an avant-garde topical spray for treating premature ejaculation), Graspa (third-generation treatment for ALL and ALM leukemia), and Cariprazine (an antipsychotic drug seeming to alleviate bipolar disorders in adults suffering of schizophrenia) and 3) **further development and consolidation of REC as a player in the field of Rare Diseases**, a profitable niche-segment that offers higher margins with lower volumes. In particular, sales for Rare Diseases drugs are expected to grow by 13.4% with respect to 2016 and account for 17% of total revenues in 2017E, whereas in 2016 they corresponded to 16% of total revenues.

Pharmaceutical sales are expected to detain a predominant contribution to revenue generation, accounting for 95.5% of total revenues from 2017E to 2021E, followed by sales of **pharmaceutical chemicals** (3.5% of total revenues), and lastly by **other revenues**, e.g. royalties, accounting for 1% of total revenues.

The **forecast of pharmaceutical sales** revenue has been **based on the types of products**. We opted for this approach instead of basing our analysis on geographical distribution because **REC does not deliver the same product line in all the 170 countries** in which its drugs are distributed.

A. Revenue forecast by product category

Firstly, we proceeded with the identification of the types of products, dividing them into three subcategories, namely **corporate products** (such as Urorec, Livazo, Fortacin and Lercanidipine), **subsidiaries' local products** (such as Methadone, distributed only in France, and Entact, distributed just in Italy), and **Rare Diseases drugs**. Secondly, we have predicted their growth rates considering: their own **characteristics** (patent protection, quality of the treatment, and existence of potential substitutes), **their geographical distribution**, and the **Business Plan 2017-2019** presented on 9th Feb 2016. We then evaluated the potential of the pipeline.

Corporate products

We expect **Corporate Products** to increase at a weighted average CAGR of 7% in the period 2016-2021.

a. **Zanidip and Zanipress** sales are expected to decrease by 8.8% in 2017E due to patent expiration of Zanipress, which is expected to cause a drop in sales by 30%.

However, the cardiovascular disorders market is small compared to the pharmaceutical market as a whole and therefore not particularly attractive. A number of generic players following patent expiry have left the market for a variety of reasons. This is why Lercanidipine franchise is expected to still account for c.a. 12% of total sales from 2016 to 2021 (9% in 2021E). Furthermore, REC still offers third-generation treatments for cardiovascular disorders, thus continuing to have a competitive product in the market.

b. **Urorec**: sales of this treatment for benign prostatic hyperplasia (BPH) are expected to grow at a CAGR of 9%. This positive trend is explained by the fact that Urorec detains 10% of the market share of BPH market in 17 countries, and we expect it to keep such position.

c. **Livazo**: the treatment for high cholesterol is expected to grow at a CAGR of 30%. The product has such a high CAGR because it will be launched in two profitable new markets: Russia and Turkey.

d. **Fortacin**: Fortacin is the first local treatment for premature ejaculation (competitors rely on psychotropic drugs and on injectables). To forecast the growth rate we looked at the CAGR of the market for treatments of disorders of the male sex organ, which is 9% (Technavio market research). The growth is line with the market trend as it is going to progressively gain market share.

Subsidiaries' local products

We expect them to grow at a CAGR of 5.1% as original brands do globally (IMS Health), where for original brands it is meant a prescription-bound product marketed with a brand name by the originator (REC subsidiary) or their licensee. Hence, subsidiaries' local products are expected to account for 23% of consolidated revenues in 2017E.

Rare Diseases

We forecast a growth at a weighted average CAGR of 14% (Evaluatepharma and team estimates). Drivers of this growth are the consolidation of the spread of Carbaglu in the USA (declared by management 11th January 2017), the approval for the commercialization of Cystadrops and the introduction of Graspa (ALL and ALM).

Carbaglu is currently approved for the treatment of hyperammonemia due to NAGS deficiency - extremely rare inherited metabolic disorder which leads to accumulation of ammonia in the blood. Carbaglu is the only existing specific treatment of NAGS deficiency and this genetic disorder requires lifelong treatment. Therefore a strong position in the market over the forecasted period is expected (2016E-2021E).

Cystadrops is a new gel formulation of cysteamine eye drops. The commercialization of this product, starting from 2017 (approval on Jan 27th), is expected to be a driver as the management intends to exploit the sales potential of the product and because Cystadrops is the first gel treatment approved in Europe to cure eye cystinosis. Moreover, it is considered better than its competitor Cystaran since it can be used 4-5 times a day and its gel formulation allows an easier and more stable application (source: Associazione Cistinosis).

Cariprazine - Drug for the treatment of schizophrenia, REC will market Cariprazine in Western Europe, Algeria, Tunisia, and Turkey. According to the information provided by Gedeon Richter (originator of Cariprazine), approximately 3.6 million people are affected by bipolar disorders and more than 2.6 million people are affected by schizophrenia. Therefore, sales of Cariprazine are expected to grow at an 8.6% CAGR - as original brands do in pharmerging countries (IMS Health)

Graspa (launch in 2017) - its sales are expected to augment at a CAGR of 59%, due to the urgent need of the treatment for people affected by acute leukemia (0.4% of Europeans are affected by ALM and 0.2% are affected by ALL). Moreover, ca. 15% of people affected by ALL are sensitive to second generation treatments, whereas 60% of people affected by ALM are intolerant to the current treatment, asparaginase. (Source: Document of Reference Erytech 2016). Peak sales expected to account for 31.7M in 2021.

REC 0438: Treatment for overactive bladder, still in Phase II in EU.

Revenue forecast other segments

With respect to the other two segments contributing to revenue generation, we expected a constant growth for both of them. The steady trend is due to the fact that REC is not oriented to investing strongly in the pharmaceutical chemicals production or in increasing significantly the number of licensing-out agreements. Therefore, CAGR for pharmaceutical chemicals is 9%, accounting constantly for 3.5% of total revenues.

With respect to other revenues, they are predicted to account steadily for 1% of total revenues.

Mil.	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016a	2017a	2018a	2019a	2020a	2021a
Total revenue	628,435	689,434	747,524	728,134	762,044	829,211	941,630	987,356	1,047,818	1,153,901	1,342,322	1,361,333	1,408,485	1,652,117	1,823,669
Chg.		9.7%	8.4%	-2.6%	4.7%	8.7%	13.7%	4.6%	6.1%	7.7%	13.7%	1.4%	3.5%	10.1%	10.3%
Pharmaceutical chemicals	34,001	31,198	26,890	25,864	28,421	30,900	32,014	33,700	36,956	40,387	43,654	47,596	52,218	56,888	62,138
as of % sales	5.4%	4.5%	3.6%	3.6%	3.7%	3.7%	3.4%	3.4%	3.4%	3.5%	3.2%	3.5%	3.7%	3.4%	3.4%
Chg.		0.0%	-8.2%	-3.8%	9.0%	8.7%	3.6%	5.3%	7.0%	8.2%	7.6%	8.9%	9.7%	8.9%	9.2%
Pharmaceutical Sales	594,434	658,236	720,634	702,270	733,623	797,311	909,615	953,656	1,010,862	1,113,514	1,298,668	1,313,737	1,356,267	1,595,229	1,761,531
as of % sales	94.6%	95.5%	96.4%	96.4%	96.3%	96.3%	96.6%	96.6%	96.6%	96.5%	96.8%	96.5%	96.3%	96.6%	96.6%
Chg.		11.6%	11.6%	13.2%	-22.6%	10.4%	11.8%	7.2%	6.1%	9.0%	13.7%	1.1%	4.8%	10.3%	10.4%
Corporate products	186,645	208,269	235,715	182,434	192,857	212,943	237,982	255,085	278,075	303,400	305,428	327,381	353,679	386,081	425,026
as of % sales	29.7%	30.2%	31.5%	25.3%	25.3%	25.7%	25.3%	25.8%	26.5%	26.3%	22.6%	24.1%	25.3%	23.4%	23.4%
Chg.		11.6%	11.6%	13.2%	-22.6%	10.4%	11.8%	7.2%	6.1%	9.0%	13.7%	1.1%	4.8%	10.3%	10.4%
Zanidip* (pericardipine)	186,650	208,277	214,949	148,720	124,718	114,573	106,900	109,245	115,707	114,000	118,560	123,302	128,234	133,364	138,698
as of % sales	29.7%	30.2%	28.8%	20.4%	16.4%	13.8%	11.6%	11.1%	11.0%	9.9%	9.1%	9.1%	8.6%	8.1%	7.6%
Chg.		11.4%	3.3%	-30.8%	-16.1%	-8.1%	-5.0%	0.3%	5.9%	-1.5%	4.0%	4.0%	4.0%	4.0%	4.0%
Zanipress* (pericardipine renopressin)	819	6878	20766	31658	41592	49325	59429	61270	65675	69,100	48,370	43,533	39,180	35,262	31,786
as of % sales	0.1%	1.0%	2.8%	4.3%	5.5%	6.0%	6.4%	6.2%	6.3%	6.0%	3.9%	3.2%	2.6%	2.1%	1.7%
Chg.		793.8%	201.9%	52.5%	31.4%	18.6%	21.3%	2.4%	7.2%	5.2%	-30.0%	-10.0%	-10.0%	-10.0%	-10.0%
Zanidip + Zanipress	187,669	214,975	235,715	180,178	166,310	165,898	168,729	170,515	181,382	183,100	166,930	166,835	167,414	168,626	170,434
as of % sales	30%	31%	32%	25%	22%	20%	18%	17%	17%	16%	13%	12%	11%	10%	9%
Chg.		14.6%	9.6%	-23.5%	-7.8%	-1.5%	2.9%	1.1%	6.4%	0.9%	-8.8%	-0.1%	0.3%	0.7%	1.1%
Uniret* (alodosisin)	-	-	-	2,056	19,750	32,740	46,737	59,052	68,275	85,200	92,868	101,226	110,336	120,267	131,091
as of % sales	0.0%	0.0%	0.0%	0.3%	2.6%	4.0%	5.0%	6.0%	6.5%	7.4%	7.5%	7.4%	7.8%	7.4%	7.2%
Chg.				0.3%	860.6%	65.8%	42.8%	26.3%	15.6%	24.8%	9.0%	9.0%	9.0%	9.0%	9.0%
Uvasol* (pericardipine)	-	-	-	-	6,797	16,305	22,516	25,518	28,418	35,100	45,630	59,319	75,928	97,188	124,401
as of % sales	0.0%	0.0%	0.0%	0.0%	0.9%	2.0%	2.4%	2.6%	2.7%	3.0%	3.7%	4.4%	5.1%	5.9%	6.8%
Chg.					139.89%	38.09%	13.3%	11.3%	11.3%	23.51%	30%	30%	28%	28%	28%
Other corporate products	43,990	46,205	37,152	52,770	59,183	65,907	84,744	99,300	144,200	154,608	187,904	225,864	269,050	318,089	373,677
as of % sales	7.0%	6.7%	5.0%	7.2%	7.8%	8.0%	9.0%	10.1%	13.8%	13.4%	15.1%	16.6%	18.0%	19.3%	20.5%
Chg.		7.0%	5.0%	-19.6%	41.0%	12.2%	11.4%	28.6%	45.2%	7.2%	18.6%	8.6%	8.6%	8.6%	8.6%
Fortacin	-	-	-	-	-	-	-	-	-	-	20,000	21,800	23,762	25,901	28,232
as of % sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	1.6%	1.6%	1.6%	1.5%
Chg.											1.6%	1.6%	1.6%	1.6%	1.5%
Drugs for rare diseases	3,500	43,900	44,851	58,725	69,257	75,857	128,058	123,200	153,130	186,800	211,813	240,917	276,915	316,037	356,591
as of % sales	0.6%	6.4%	6.0%	8.1%	9.1%	9.2%	13.6%	12.5%	14.6%	16.2%	17.0%	17.7%	18.5%	19.1%	19.6%
Chg.		1154.3%	2.2%	30.9%	17.9%	9.5%	68.8%	-3.8%	24.3%	22.0%	13.4%	13.7%	14.9%	14.1%	12.8%
Graspa	-	-	-	-	-	-	-	-	-	-	3,158	7,449	16,578	25,240	31,771
Chg.										0.0%	0.0%	1.5%	3.3%	6.0%	8.9%
Other rare diseases sales	-	-	-	-	-	-	-	-	-	186,800	208,656	233,068	260,337	290,797	324,020
as of % sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.2%	15.5%	17.1%	18.5%	19.1%	19.6%
Chg.										22.0%	11.7%	11.7%	11.7%	11.7%	11.7%
OTC	-	-	-	-	-	-	-	-	-	186,000	194,928	204,285	214,090	224,367	235,136
as of % sales	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.1%	17.6%	16.9%	16.1%	15.7%	15.0%	14.3%	13.6%	12.9%
Chg.							14.8%	14.8%	1.9%	5.1%	-4.8%	-4.8%	-4.8%	-4.8%	-4.8%
Subsidiaries/local product	306,786	351,713	381,985	374,809	383,286	429,231	298,487	290,296	247,252	272,321	286,209	300,806	316,147	332,270	349,216
as of % sales	52.0%	51.0%	51.1%	51.5%	50.3%	51.7%	31.7%	29.4%	23.6%	23.6%	23.0%	22.1%	22.1%	21.1%	19.2%
Chg.		0	0	0	0	0	0	0	-15%	10%	5.1%	5.1%	5.1%	5.1%	5.1%
Other revenue	33,512	8,348	20,931	33,352	29,000	14,448	8,747	12,001	12,048	10,385	12,385	14,385	16,385	18,385	20,385
as of % sales	5.3%	1.2%	2.8%	4.6%	3.8%	1.7%	0.9%	1.2%	1.2%	0.9%	1.0%	1.1%	1.1%	1.1%	1.1%
Chg.		-77.3%	131.3%	63.6%	-16.9%	-54.2%	-46.7%	30.8%	5.4%	-21.7%	19.3%	16.1%	13.9%	12.2%	10.9%

6. PIPELINE AND ITS POTENTIAL

NAME	ORIGINATOR	INDICATION	DEVELOPMENT STATUS
Specialty Care			
FORTACIN™	Plethora Solutions	Premature ejaculation	Variation of EU approval completed
VITAROS®	Apricus	Erectile dysfunction	Approved by a number of health authorities in Europe
Rare Diseases			
CARBAGLU®	Recordati	Organic acidemias	Approved in EU Phase III in U.S.A.
CARBAGLU®	Recordati	Hyperammonaemia	New formulations
CYSTADROPS®	Recordati	Ocular cystinosis	Filed in EU
methadone		Treatment of cancer related pain	Filed in France
GRASPA®	Erytech	Acute lymphoblastic leukemia (ALL) in patients with first recurrence of Philadelphia chromosome negative ALL	Filed in EU
		Acute myeloid leukemia (AML) in patients >65 unfit for chemotherapy	Phase II b
REC 0438	Recordati/UFPeptides	Overactive bladder (OAB) in patients with spinal lesions	Phase I/II in EU

7. FINANCIAL ANALYSIS

Income Statement

In million Euros	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016E	2017E	2018E	2019E	2020E	2021E
Net sales	628.4	689.6	747.5	728.1	762.0	828.3	941.6	987.4	1047.7	1153.9	1242.3	1361.2	1498.5	1652.1	1823.1
% YoY Growth	9.1%	9.7%	8.4%	-2.6%	4.7%	8.7%	13.7%	4.9%	6.1%	10.1%	7.7%	9.6%	10.1%	10.3%	10.3%
Gross Profit	441.3	486.6	533.9	511.0	521.2	551.1	634.2	699.2	745.9	835.8	911.9	1012.3	1128.9	1244.1	1372.3
Margin	70.2%	70.6%	71.4%	70.2%	68.4%	66.5%	67.3%	70.8%	71.2%	72.4%	73.4%	74.4%	75.3%	75.3%	75.3%
Selling expenses	202.0	214.2	223.7	216.5	232.2	250.6	275.2	282.9	293.2	316.1	335.4	353.9	374.6	396.5	437.5
% of sales	32.2%	31.1%	29.9%	29.7%	30.5%	30.3%	29.2%	28.7%	28.0%	27.4%	27.0%	26.0%	25.0%	24.0%	24.0%
G&A	33.9	39.4	43.7	44.0	45.4	45.5	54.1	57.2	59.0	65.0	69.9	63.0	69.4	76.5	66.2
% of sales	5.4%	5.7%	5.8%	6.0%	6.0%	5.5%	5.7%	5.8%	5.6%	5.6%	5.6%	4.6%	4.6%	4.6%	3.6%
R&D	49.1	58.9	69.4	68.8	56.0	63.4	74.7	85.3	76.7	83.7	99.0	108.4	119.4	131.6	145.2
% of sales	7.8%	8.5%	9.3%	9.5%	7.3%	7.7%	7.9%	8.6%	7.3%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
EBITDA	156.2	174.1	197.0	181.7	187.7	191.7	230.2	273.8	317.0	371.0	407.6	486.9	565.5	639.5	723.4
Margin	24.9%	25.3%	26.4%	25.0%	24.6%	23.1%	24.4%	27.7%	30.3%	32.2%	32.8%	35.8%	37.7%	38.7%	39.7%
D&A	24.7	29.4	34.8	27.0	24.3	24.7	34.7	42.8	38.5	42.9	52.0	54.5	58.7	63.4	68.8
% of Sales	3.9%	4.3%	4.7%	3.7%	3.2%	3.0%	3.7%	4.3%	3.7%	3.7%	4.2%	4.0%	3.9%	3.8%	3.8%
Depreciation	13.2	11.1	11.1	10.6	10.5	8.8	9.7	11.2	11.9	15.3	16.0	17.0	18.7	20.5	22.5
Amortization	11.6	18.3	23.7	16.3	13.7	16.0	25.0	31.6	26.5	27.6	36.1	37.5	40.0	43.0	46.3
EBIT	131.5	144.7	162.2	154.7	163.5	166.9	195.5	231.0	278.5	328.2	355.6	432.4	506.8	576.1	654.6
% of sales	20.9%	21.0%	21.7%	21.3%	21.4%	20.2%	20.8%	23.4%	26.6%	28.4%	28.6%	31.8%	33.8%	34.9%	35.9%
Financial Charges	4.1	6.6	5.8	3.8	3.5	6.6	14.6	16.3	13.1	13.9	10.7	7.5	3.2	-1.8	-7.8
Pre Tax Earnings	127.4	138.1	152.7	151.0	160.0	160.3	180.8	214.8	265.4	314.3	344.9	424.9	503.6	577.8	662.4
Taxes	42.6	37.7	42.1	42.4	43.6	41.8	47.1	53.6	66.6	81.1	87.2	107.9	128.4	146.7	168.4
Tax rate	33.4%	27.3%	27.6%	28.1%	27.2%	26.1%	26.0%	24.9%	25.1%	25.8%	25.3%	25.4%	25.5%	25.4%	25.4%
Profit for the period	84.9	100.4	110.6	108.5	116.4	118.5	133.7	161.2	198.8	233.2	257.7	317.0	375.2	431.1	494.0
Net Margin	13.5%	14.6%	14.8%	14.9%	15.3%	14.3%	14.2%	16.3%	19.0%	20.4%	20.7%	23.0%	24.5%	25.3%	26.0%

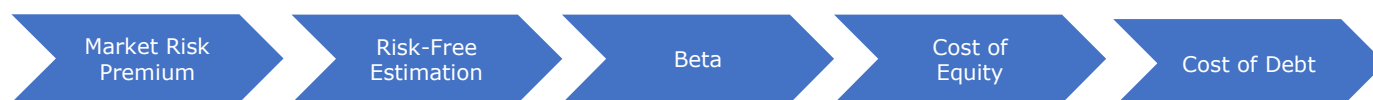
Invested Capital

INVESTED CAPITAL	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016E	2017E	2018E	2019E	2020E	2021E
Working Capital	128.8	131.5	137.5	118.7	150.8	174.8	213.0	207.7	213.7	222.0	237.4	258.3	282.4	311.4	343.6
Commercial WC	134.5	137.0	132.6	126.6	141.2	155.4	179.8	179.0	177.2	179.9	193.7	212.2	233.6	257.6	284.3
Trade Receivables	74.7	83.1	86.6	85.2	108.3	126.4	140.4	141.2	143.1	157.1	163.1	172.1	182.2	200.9	221.7
Inventory	80.3	88.6	81.8	93.1	98.7	106.9	107.2	112.5	106.6	115.1	119.5	126.1	133.4	147.1	162.3
Payables	(39.0)	(47.8)	(57.9)	(54.5)	(66.3)	(56.3)	(87.1)	(62.7)	(74.5)	(82.1)	(88.4)	(96.8)	(106.6)	(117.5)	(129.7)
Other WC	28.0	25.1	25.6	30.7	26.3	28.5	30.3	41.4	46.8	51.6	55.5	60.9	67.0	73.9	81.5
Other Receivables	67.1	72.9	83.5	85.3	92.6	84.8	117.5	104.1	121.3	133.6	143.9	157.7	173.6	191.3	211.1
Other Payables	89.8	83.7	79.6	64.2	84.5	118.6	125.9	145.0	139.2	139.9	149.0	161.5	175.8	193.9	213.9
Net Fixed Assets	398.1	448.8	459.3	471.9	573.8	704.5	843.2	836.7	830.0	991.2	1,039.0	1,107.5	1,184.1	1,269.8	1,365.5
Tangible Assets	68.0	58.0	55.4	53.0	55.4	60.0	81.3	92.3	109.0	133.0	141.9	155.5	170.5	187.2	205.8
Intangibles	90.5	92.6	96.5	113.5	149.6	231.5	295.5	266.0	246.5	337.3	351.0	374.7	402.1	433.5	469.2
Goodwill	243.9	289.8	303.7	305.7	365.7	413.2	468.8	463.5	453.3	499.3	524.1	554.8	588.5	625.6	666.7
Other Assets	25.6	35.4	29.3	24.6	25.8	33.6	35.4	54.8	64.5	65.8	67.1	68.4	69.8	71.2	72.6
Other LT Liabilities	30.0	27.0	25.6	25.0	22.7	33.7	37.8	39.9	43.3	44.1	45.0	45.9	46.8	47.8	48.7
Invested Capital	487.9	532.5	538.9	536.1	658.3	823.0	969.2	981.6	969.2	1,131.1	1,188.0	1,269.0	1,359.9	1,463.6	1,579.5
Net Debt	97.3	86.7	30.0	(39.9)	63.8	161.6	267.3	194.2	99.2	173.8	133.7	93.8	40.6	(22.1)	(97.9)
Debt	186.7	181.7	123.7	121.8	169.0	200.1	319.6	331.2	324.7	325.5	337.4	376.1	422.2	475.4	536.8
Cash	89.4	95.0	93.8	161.7	105.2	38.4	52.3	137.0	225.5	151.6	203.7	282.3	381.6	497.5	634.7
Equity	390.6	445.7	509.0	576.0	594.5	661.4	701.8	787.4	870.0	957.3	1,054.4	1,175.2	1,319.3	1,485.7	1,677.4
Capital Employed	487.9	532.5	538.9	536.1	658.3	823.0	969.2	981.6	969.2	1,131.1	1,188.0	1,269.0	1,359.9	1,463.6	1,579.5

Cash Flow Statement

In Million €	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016E	2017E	2018E	2019E	2020E	2021E
Net income	84.87	100.40	110.58	108.55	116.41	118.44	133.71	161.19	198.80	233.19	257.67	316.99	375.17	431.10	493.98
D&A	25.97	29.44	34.81	26.95	24.27	24.75	34.71	42.79	38.48	42.86	52.01	54.53	58.70	63.44	68.80
Interest paid	4.07	6.58	5.80	3.79	3.47	6.63	14.63	16.26	13.08	13.91	10.69	7.50	3.25	(1.77)	(7.83)
Non Cash charges and provisions	(7.09)	4.89	5.46	(4.29)	(3.07)	2.89	(0.44)	(10.30)	(0.18)	(1.29)	(1.32)	(1.34)	(1.37)	(1.40)	(1.42)
Change in WC	(3.31)	19.25	4.18	9.34	(16.18)	(33.38)	2.15	(14.52)	10.27	(0.70)	(9.10)	(12.49)	(14.33)	(18.03)	(20.06)
Cash from operations	104.51	160.57	160.84	144.33	124.89	119.32	184.76	195.40	260.45	287.96	309.95	365.19	421.42	473.35	533.45
Capex	(14.76)	(42.08)	(27.00)	(33.26)	(43.01)	(65.37)	(78.47)	(25.59)	(33.50)	(57.70)	(99.39)	(122.51)	(134.86)	(148.69)	(164.08)
FCF to firm (FCFF)	89.75	118.49	133.83	111.07	81.88	53.95	106.29	169.81	226.96	230.27	210.56	242.68	286.56	324.65	369.38
Debt and interest repayment	(20.35)	(2.91)	(8.73)	23.73	19.37	(18.09)	128.65	12.08	(27.27)	(13.13)	1.23	31.16	42.86	55.04	69.15
FCF to equity (FCFE)	69.40	115.58	125.11	134.80	101.25	35.86	234.94	181.89	199.68	217.14	211.79	273.84	329.42	379.69	438.53
Equity Investments	(139.26)	(70.58)	(19.97)	2.08	(63.87)	(87.15)	(123.14)	-	-	(146.00)	-	-	-	-	-
Buybacks & Share Issue	(22.57)	2.45	2.48	6.23	(0.41)	5.64	6.49	6.01	(5.98)	(5.98)	(5.98)	(5.98)	(5.98)	(5.98)	(5.98)
Dividends paid	(36.96)	(42.22)	(49.26)	(54.36)	(93.14)	(61.35)	(64.64)	(75.40)	(110.77)	(139.91)	(154.60)	(190.19)	(225.10)	(258.66)	(296.39)
Other	(2.49)	(3.08)	2.46	4.47	(10.42)	(2.25)	(18.12)	(2.11)	4.36	0.87	0.88	0.90	0.92	0.94	0.96
Net change in Net Financial Position	(131.88)	2.15	60.81	93.21	(66.59)	(109.26)	35.53	110.40	87.30	(73.89)	52.10	78.57	99.25	115.99	137.12

8. WACC COMPUTATION



WACC has been computed by considering the weighted average of the cost of equity and the cost of debt. They have been weighted respectively with current market value of equity and market value of debt.

Market risk premium

Obtained from Fernandez survey on MRP, which is a value commonly adopted in 2016 by analysts, economic professors and managers in Italy (last update: May 6, 2016).

Risk-free estimation

To properly estimate the risk-free rate, we decided to take the 10-year government bonds of the countries where REC has established its subsidiaries and generates its revenues. Concerning the voice "Others international" we considered the US bond (being the most common risk free measure), while for "other CEE" and "other Western Europe" we considered the German bond (being the equivalent of US bond in Europe). We then assigned them specific country weights according to the geographical revenue breakdown provided by data included in the financial statements. After identifying the appropriate weight and relative return, we calculated the weighted average for every geographic macro area, resulting in a weighted risk free rate of 2.41%.

COUNTRY	10-Y-GOV-BONDS	COUNTRY WEIGHT	WEIGHTED SUM
PORTUGAL	4.07%	4.00%	0.0016
SPAIN	1.60%	6.90%	0.0011
ITALY	2.26%	20.60%	0.0047
FRANCE	1.04%	10.30%	0.0011
GERMANY	0.32%	9.10%	0.0003
TURKEY	1.68%	7.80%	0.0013
TUNISIA	5.86%	3.80%	0.0022
OTHERS INTERNATIONAL	2.41%	15.20%	0.0037
OTHER C.E.E.	0.32%	2.90%	0.0001
OTHERS WESTERN EUROPE	0.32%	3.60%	0.0001
RUSSIA	8.05%	7.10%	0.0057
USA	2.41%	9.10%	0.0022
Risk-Free rate 2.41%			

Beta

Beta was calculated in two different ways:

1. **Direct Method:** we considered weekly prices regression of the FTSE MIB, FTSE ITALY, STOXX Europe (where REC is listed) and S&P500 (being the most considered index in the USA, where REC obtains more than 16% of its Revenue) using 3 years time series and weekly closing prices as variable. Looking however at the R-square values it is clear that the direct beta is not truly reliable. We therefore calculated beta using a second method.

Index	Years	Regression Beta	R-square
STOXX Europe	3	0.557	0.149
FTSE MIB	3	0.339	0.157
FTSE Italy	3	0.335	0.158
S&P500	3	0.660	0.101

2. **Bottom-up approach:** the peers were chosen based on the following three criteria: type of business, Operating leverage and Financial leverage. After taking the peers' levered betas, transposing them in unlevered ones and calculating the average, we determined REC's levered beta. D/E ratios of both the peers and REC were taken from Factset (as they reflect current figures instead of historical ones), while regarding the Tax rate we considered the statutory rate where each peer is legally located (except for REC, for which we used the effective tax rate). Afterwards, as Bloomberg and Damodaran suggest, we computed the adjusted Beta. (Adj. $B = 67\% \times B + 33\% \times 1$), leading to an indirect beta of 0.742.

Company Name	Tax rate	Beta (unadj.)	D/E	Unlevered Beta
Recordati	25%	-	0.41	-
Ipsen	33%	0.538	0.03	0.529
Shire	13%	0.672	0.10	0.619
Orion	20%	0.507	0.46	0.372
Actelion	18%	0.630	0.12	0.573
UCB	34%	0.334	0.51	0.250
REC's Beta (adjusted) 0.742				

Cost of Equity

The cost of equity was computed through the CAPM model.

Cost of Debt

To compute the cost of debt we looked at the composition of REC's medium and long-term loans. After identifying the residual value of each loan, we computed the respective weight. Since some loans were divided into multiple tranches, we computed a weighted interest average after hedging. Once we obtained every weight and identified the respective interest rate, we estimated the cost of debt, amounting to 2.88%.

Loans granted to Recordati S.p.A.	Debt residual value (€ thousands)	Weight	Interest rate after hedging
Privately place with International institutional investors	74,700	0.26	2.98%
Centrobanca	40,909	0.14	2.58%
UniCredit	35,000	0.12	1.44%
Banca Nazionale del Lavoro(BNL)	25,000	0.09	1.69%
ING Bank	26,250	0.09	1.91%
Loans granted to other Group companies	Debt residual value (€ thousands)	Weight	Interest rate after hedging
Privately placed with international investors	63,743	0.22	0.00%
IFC- World Bank	22,197	0.01	13.25%
ING to subsidiaries	1,953	0.01	3.00%
Others	1,554	0.08	1.97%
Grand total debt outstanding 291,306			
Cost of Debt 2.88%			

9.DCF MODEL

CASH FLOW	2015A	2016A	2017E	2018E	2019E	2020E	2021E
Net income	198,802	235,046	256,832	312,778	366,623	417,451	474,277
D&A	38,483	42,861	52,007	54,532	58,703	63,437	68,795
Interest paid	13,080	11,401	11,814	13,148	14,723	16,527	18,584
Non Cash charges and prov	-183	-1,290	-1,316	-1,342	-1,369	-1,396	-1,424
Change in WC	10,269	-704	-9,104	-12,491	-14,334	-18,028	-20,060
Cash from operations	260,451	287,314	310,233	366,625	424,347	477,991	540,172
Capex	-33,496	-57,695	-99,386	-122,511	-134,864	-148,691	-164,076
FCF to firm (FCFF)	226,955	229,619	210,848	244,114	289,483	329,300	376,095
Periods			1	2	3	4	5
Discount factor			0.94	0.88	0.83	0.78	0.73
Present Values			198,237.42	215,787.68	240,588.11	257,311.90	276,301.37

INPUTS	
WACC	6.36%
Cost of Equity	6.56%
Cost of Debt	2.88%
Adjusted Beta	0.742
Market Risk Premium	5.60%
Risk-free rate	2.41%
Portion of Debt	0.045
Portion of Equity	0.955

Total Present Value	1,188,226.49
Present Value of TV	6,462,246.29
Enterprise Value	7,650,472.78
Net Debt	50,089.00
Market Vaue	7,600,383.78
Outstanding Shares	209,125.00
Target Price	36.34

Sensitivity Analysis

		WACC								
		5.09%	5.34%	5.59%	5.84%	6.09%	6.34%	6.59%	6.84%	7.09%
Terminal Growth Rate	1%	€ 37.07	€ 34.97	€ 33.08	€ 31.38	€ 29.83	€ 28.43	€ 27.15	€ 25.97	€ 24.89
	1.25%	€ 39.07	€ 36.73	€ 34.65	€ 32.78	€ 31.09	€ 29.57	€ 28.18	€ 26.91	€ 25.74
	1.50%	€ 41.33	€ 38.71	€ 36.40	€ 34.33	€ 32.48	€ 30.82	€ 29.30	€ 27.93	€ 26.67
	1.75%	€ 43.90	€ 40.95	€ 38.36	€ 36.07	€ 34.02	€ 32.19	€ 30.54	€ 29.04	€ 27.68
	2%	€ 46.85	€ 43.50	€ 40.58	€ 38.01	€ 35.73	€ 33.72	€ 31.90	€ 30.27	€ 28.79
	2.25%	€ 50.28	€ 46.42	€ 43.10	€ 40.21	€ 37.66	€ 35.42	€ 33.42	€ 31.62	€ 30.00
	2.50%	€ 54.31	€ 49.82	€ 46.00	€ 42.71	€ 39.83	€ 37.33	€ 35.10	€ 33.12	€ 31.34
	2.75%	€ 59.11	€ 53.81	€ 49.36	€ 45.58	€ 42.30	€ 39.48	€ 36.99	€ 34.79	€ 32.82
	3%	€ 64.93	€ 58.57	€ 53.32	€ 48.91	€ 45.15	€ 41.93	€ 39.13	€ 36.66	€ 34.47

10. PEERS SELECTION

Company Name	Selected	Explanation
Novartis	No	Too big company
Pfizer	No	Too big company
J&J	No	Too big company
Bayer	No	Too big company
Stada Arzneimittel	Yes	Similar business model and geographical distribution
Ipsen	Yes	Very similar business model and financial structure.
Hikma Pharmaceuticals	Yes	Similar business model
Shire	No	Although it has a similar debt structure, the company is too big for multiples valuation purposes
KRKA dd	Yes	Focus on primary and specialty care, similar financial structure
Gedeon Richter	Yes	Similar structure and geographical exposure
UCB	Yes	Similar business model and geographical exposure
Actelion	Yes	Focus on specialty care, similar geographical exposure
Orion B	Yes	Similar business model

11. MULTIPLE VALUATION

Standard Multiples Evaluation		
Target Price	Forward 1y	Forward 3y ave
EV/EBITDA	30.23 €	31.22 €
P/E	28.50 €	31.78 €
PEG Ratio	24.98 €	24.98 €
EV/EBIT	32.92 €	33.69 €
AVERAGE	29.16 €	30.42 €

In order to obtain a price with multiple valuation for future years, we took the average fundamentals (EBIT, EBITDA and Earnings) for the selected competitors between 2017 and 2019. Afterwards MV or EV has been divided by these averages to obtain a forward-looking multiple for each competitor. We took these multiples and used them as a benchmark for REC. Thus, we multiplied the benchmark for REC fundamental, namely EBIT, EBITDA, or Earnings, for the analyzed period, e.g. 2017-2019. From that we obtained a target price.

With respect to the target price derived from PEG Ratio, we started by taking the average of the selected competitors PEG ratio (provided by FactSet and calculated (P/EPS)/CAGR). The average PEG ratio has then been multiplied by the expected growth rate of REC to obtain its P/EPS. To obtain a target price we multiplied REC's P/EPs for the estimated EPS.

Company Name	EBIT 2016	EBIT 2017	EBIT 2018	EBIT 2019	AVERAGE EBIT 2017-19	EV	EV/EBIT fwd
Recordati	327	371	454	478	435	6,269.5	14.43
UCB	766	917	1,114	1,248	1,093	14,505.3	13.27
Actelion	865	896	1,030	1,250	1,059	26,981.3	25.49
Ipsen	347	393	474	583	483	6,503.7	13.46
Gedeon Richter	181	210	258	281	250	3,913.2	15.67
STADA Arzneimittel	281	309	334	366	336	4,859.5	14.45
Hikma Pharmaceuticals	329	456	542	616	538	6,545.0	12.17
Orion B	313	292	304	318	305	6,616.3	21.72

Company Name (,000€)	EBITDA 2016	EBITDA 2017	EBITDA 2018	EBITDA 2019	AVERAGE EBITDA 2017-19	EV actual	EV/EBITDA fwd
Recordati	371	426	502	536	488	6,269	12.85
UCB	1,012	1,165	1,346	1,466	1,326	14,505	10.94
Actelion	871	891	1,055	1,250	1,153	26,981	23.41
Ipsen	399	469	557	679	568	6,504	11.44
Gedeon Richter	288	326	368	406	367	3,913	10.67
STADA Arzneimittel	404	432	462	500	465	4,860	10.46
Hikma Pharmaceuticals	439	579	660	738	659	6,545	9.93
Orion B	355	327	341	362	343	6,616	19.27

Company Name	Earnings 2016	Earnings 2017	Earnings 2018	Earnings 2019	AVERAGE Earnings 2017-19	Mkt V	P/E fwd
Recordati	237	265	330	342	312	6,169.2	19.76
UCB	492	599	753	832	728	13,265.3	18.22
Actelion	665	726	838	1,017	860	27,452.8	31.91
Ipsen	148	277	336	409	341	6,509.2	19.11
Gedeon Richter	205	195	234	243	224	4,054.0	18.10
STADA Arzneimittel	142	176	200	236	204	3,597.8	17.64
Hikma Pharmaceuticals	179	285	360	407	351	5,813.2	16.58
Orion B	249	230	243	252	242	6,641.2	27.48

FORWARD				FORWARD (ave 3-years)				
Company Name	EV/EBITDA	P/E	EV/EBIT	EV/EBITDA	P/E	EV/EBIT	Company Name	PEG ratio
Recordati	15.3	22.9	17.1	12.9	19.8	14.4	Recordati	1.8
UCB	11.6	17.6	14.6	10.9	18.2	13.3	UCB	1.0
Actelion	29.2	33.7	29.2	23.4	31.9	25.5	Actelion	2.4
Ipsen	13.6	22.2	16.1	11.4	19.1	13.5	Ipsen	1.5
Gedeon Richter	11.0	19.7	16.8	10.7	18.1	15.7	Gedeon Richter	0.9
STADA Arzneimittel	10.8	17.6	15.0	10.5	17.6	14.4	STADA Arzneimittel	3.3
Hikma Pharmaceuticals	10.7	17.9	13.3	9.9	16.6	12.2	Hikma Pharmaceuticals	1.1
Orion B	19.9	28.7	22.3	19.3	27.5	21.7	Orion B	1.7
Average	15.2	22.5	18.2	13.7	21.3	16.6	Average PEG ratio	1.7
Median	11.6	19.7	16.1	10.9	18.2	14.4	Median	1.5
Min	10.7	17.6	13.3	9.9	16.6	12.2	Min	0.9
Max	29.2	33.7	29.2	23.4	31.9	25.5	Max	3.3
Comps benchmark multiple	15.2	22.5	18.2	13.7	21.3	16.6	Comps PEG bench.	1.7

Company Name	Enterprise EV/			EV/		Enterprise EV/			EV/		Price to Earnings		Price to Earnings		PEG Ratio
	Value/	EBITDA	EBITDA	EV/	EBITDA	Value/	EBIT	EBIT	EV/	EBIT	Actual	NTM	FY1	FY2	
	EBITDA	NTM	FY1	FY2	EBIT	NTM	FY1	FY2	EBIT	NTM	FY1	FY2			
Recordati	17.02x	15.31x	15.49x	14.32x	19.01x	17.09x	17.30x	15.96x	26.55x	22.92x	23.16x	21.54x	4.63283		
Average	18.92x	14.66x	16.16x	13.82x	24.85x	17.37x	19.49x	16.42x	47.89x	21.14x	23.72x	20.25x	2.360366		
Median	17.57x	11.30x	14.50x	11.44x	22.46x	15.57x	18.52x	15.19x	29.75x	18.79x	24.18x	18.35x	1.599014		
UCB	16.08x	11.58x	14.02x	11.90x	21.75x	14.60x	18.52x	15.12x	37.47x	17.62x	22.66x	18.12x	1.02842		
Actelion	33.54x	29.21x	30.03x	25.03x	37.28x	29.18x	29.85x	25.62x	41.69x	33.74x	34.52x	29.67x	2.42545		
Ipsen	24.60x	13.55x	16.13x	13.96x	27.64x	16.12x	18.52x	16.65x	27.72x	22.16x	25.69x	22.83x	1.49857		
Gedeon Richter	13.45x	11.01x	11.28x	9.55x	20.62x	16.84x	17.50x	13.61x	23.52x	19.66x	20.22x	16.86x	0.870883		
STADA Arzneimittel	10.35x	10.77x	12.00x	10.92x	13.77x	15.02x	17.26x	15.27x	29.75x	17.63x	19.86x	17.87x	3.29119		
Hikma Pharmaceuticals	17.57x	10.70x	14.97x	10.98x	22.46x	13.35x	19.96x	13.75x	31.52x	17.93x	26.00x	18.57x	1.14136		
Orion B	20.38x	19.87x	20.01x	19.07x	23.23x	22.28x	22.43x	21.40x	27.54x	28.70x	28.87x	27.72x	1.69946		

12. HOLT - CFROI

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Income Statement Drivers															
Sales Growth %	9.0	7.8	9.0	-4.8	5.7	10.4	14.7	4.5	6.3	10.5	7.7	9.6	10.1	10.3	10.3
EBITDA Margin %	26.1	27.5	28.6	26.7	26.2	24.7	26.3	28.5	31.2	32.2	32.8	35.7	37.7	38.7	39.6
Effective Tax Rate %	33.4	27.3	27.6	28.1	27.2	26.2	26.2	25.0	25.1	25.1	25.1	25.1	25.1	25.1	25.1
R&D % Sales	7.9	8.8	9.5	9.9	7.6	7.8	8.0	8.8	7.4	8.0	8.0	8.0	8.0	8.0	8.0
Balance Sheet and Capital Structure Drivers															
Net Working Capital Turns	3.5	3.8	4.3	3.1	4.0	5.3	5.4	3.5	2.8	3.9	3.6	3.1	2.8	2.4	2.2
NWC % of Sales	28.8	26.3	23.2	31.9	25.3	18.8	18.7	28.5	35.3	25.6	27.8	32.3	35.3	41.7	45.5
NWC	179	176	169	222	185	152	174	277	364	293	341	434	523	681	820
CAPEX	6	13	8	8	10	13	12	22	31	57	111	122	134	148	164
CAPEX, % of Sales	1.0	2.0	1.1	1.2	1.3	1.6	1.3	2.3	3.0	5.0	9.0	9.1	9.0	9.0	9.1
Asset Turns	0.55	0.57	0.59	0.51	0.52	0.54	0.52	0.50	0.49	0.54	0.52	0.51	0.51	0.49	0.49
Debt to Capital	32.3	28.3	18.2	16.9	21.5	22.6	30.7	29.1	27.3	25.0	24.0	24.0	24.0	24.0	24.0
Rate on Avg. Debt	3.5	3.8	3.3	3.6	4.8	4.0	4.1	5.2	3.8	3.5	3.5	3.5	3.5	3.5	3.5
Dividends Per Share	0.19	0.22	0.28	0.27	0.31	0.00	0.00	0.33	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Results															
CFROI %	11.6	14.4	16.8	12.6	11.2	10.8	11.7	13.2	13.2	15.6	15.2	16.2	16.9	16.9	17.0
Real Asset Growth Rate %	-0.5	2.0	4.1	8.2	3.0	5.3	17.3	7.9	6.3	0.4	9.2	10.7	9.5	11.2	10.1
Discount Rate %	4.6	7.7	5.3	5.2	6.3	5.8	4.9	4.4	3.5	6.4	6.4	6.4	6.4	6.4	6.4
Final Fade Rate %	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0

13. RISK MATRIX

	Likelihood					
	Rare	Unlikely	Possible	Likely	Almost Certain	
Severe					Generics Competition and price erosion	
Major		Family Strong Involvement	Risks connected to launch of new products & partnerships (operational risks)	Market Competition		
Moderate			Conflict of Interests	Legislation and regulatory risks and risks connected to change in management		
Minor		Credit Risks			Forex Risk	
No Significant						Interest rate risk
	Impact					

14. CORPORATE GOVERNANCE

Name	Position	Knowledge	In Recordati since
Alberto Recordati	Chairman	Graduated in Biochemistry in 1977 (University of King's College) PhD in Biochemistry (University of King's College)	1984
Andrea Recordati	Vice Chairman and CEO	Bachelor of Arts in medieval and modern history from the University of London Royal Holloway and Bedford New College	1998
Fritz Squindo	Managing Director and CFO	Graduated in Economics at Bocconi University, Milan. Employee in Finance department in Telettra S.p.A. Head of Finance and Management Accounting in Sanofi S.p.A from 1986 to 1992	1992
Enrico Baroncia	General Manager Italy	Degree in Biology and twenty years of experience in pharma industry (Menarini, PHT, Stroder, Scherin Plough, GE Healthcare, J&J, Mylan).	2013
Luca Bolliger	VP and Director of Corporate Licensing	Degree in Biochemistry at ETH Zurich with a master in Immunology. Member of Basel Institute for Immunology. Previously Global discovery portfolio manager at Hoffman-La Roche Ltd. Financial analyst at BT&T. Director Business developer at Actelion. Director of business development by Novimmune.	2012
Corrado Castellucci	VP and Director of Orphan Drugs	Degree in medicine. Worked in the sales force of Hammel Pharma. In 1988 he joined Lepetit where he was Director of Marketing, Medical and Business Operations. Director of hospital and oncology business unit and afterward Director of Specialty Care Unit at AstraZeneca. CEO at Gilead Sciences Italy (from 2007), then at NerPharMa and Nerpharma DS. General manager of Adienne in 2010.	2013
Gabriele Finzi	VP and Director of Corporate Development	Degree Business Administration with Major in Corporate Finance (Bocconi, Milan). M&A Analyst at Barilla. Responsible of Financial Planning at Siemens Medical Solutions.	2008
Daria Ghindoni	VP and Director of Corporate Legal Affairs	Degree in Law from Università Cattolica del Sacro Cuore. Her career began in 1995 in the firm Studio Associato Legale e Tributario. Corporate Career beginning in 2010 at Giochi Preziosi.	2002
Antoine Grouès	VP and Director if International Licensees Sales	Master in Biology and Master in Science in Marketing and Management at Lyon School of Management. Sales rep from 2001 at Bristol-Meyer Squibb UPSA. International Manager at Mayloy-Spindler	2007
Giuseppe Gualazzini	VP Group Human Resources	More than thirty years of experience in international human resources. Worked, among the others, in: AGIP (ENI group), SME Group, GE Medical Systems Italy (where he became Region Human Resources Manager for Italy, Greece and Turkey) and DHL group (where he covered several positions).	2014
Luisa Mainoli	VP and Director Group Finance	"Cum laude" degree in chemistry at the Università degli Studi di Milano. MBA at Bocconi University. Started doing research first at the Istituto di Chimica Industriale and then Solma SpA, Henkel Italiana and Marion Merrel Dow.	1990
Giovanni Minora	Director Corporate Auditing	Degree in Business Economics from Bocconi University. Started in 1995 as junior controller at Alcanital Services, then became assistant to the financial manager at Alcan Alluminio. Appointed Senior Internal Auditor at Foster Wheeler Italiana in 2000. Became Operations Auditing team coordinator in Edison and then head of Audit and Internal Control for IT Holding SpA.	2007
Ismail Yormaz	VP and Regional Director South-Eastern Europe and North Africa	Bachelor Degree in medicine at Ankara University. MBA from Istanbul University. Product Manager in BASF Pharma and then in Abbott Laboratories. Joined Menarini in 2002 as Group Product Manager for Turkey and was then Marketing and Sales Manager of Healthcare business in Reckitt Benckiser.	2009
Paolo Romagnoli	Director Pharmaceutical Chemicals	Degree in chemistry from the Università degli Studi di Milano. In 1988 began his activity as consultant specialized in pharmaceutical chemicals, accruing a profound management experience. Joined the Angelini Group in 2003 as manager of the fine chemicals business unit.	1974-1988 2008
Marianne Tatschke	Director Investor Relations & Corporate Communications	BA in Psychology. Master in Business Administration at McMaster University (Canada). Started as Operations Manager first and then Financial Controller at Sea Containers. Joined DET Norske Veritas as Administration Controller and in 1991 entered in Astra Farmaceutici as Planning and Control Manager. In 1996 appointed CFO.	1999
Roberto Teruzzi	Executive VP of Group Industrial Operations	Degree in veterinary medicine. Two international MBAs. Thirty years of experience in managerial roles in the pharmaceutical business. Covered different roles with growing responsibilities in various pharmaceutical companies (e.g. International Product Manager at Farmitalia Carlo Erba and Business Development Manager at Zambon). Covered then, in different companies, the role of Managing Director, General Manager Europe, Managing Director, COO and CEO-	2015
Witold Urban	VP and Regional Director Central Eastern Europe	Master of Art in Modern History at University of Gdansk. Covered different sales and marketing roles in the Consumer Healthcare sector until becoming	2013

Board of Directors

Name	Position	Education	Experience	Other Positions
Alberto Recordati	Chairman Executive	Graduated in Biochemistry in 1977 (University of King's College) PhD in Biochemistry (University of King's College)	Joined REC as a researcher in biochemistry department. In 1987 appointed as Head of the Planning and Product Development. Research project coordinator in US subsidiary from 1990 to 1992. Industrial manager for biochemical in 1992. Head of Chemical Research and Technology Division in 1995. Director of the fine chemical sector in 1999. Deputy Chairman of REC in 2004. Coordinator of drug discovery and drug development activities since 2008 and licensing-in activities from 2011.	
Andrea Recordati	Vice Chairman and CEO Executive	Bachelor of Arts in medieval and modern history from the University of London Royal Holloway and Bedford New College	Joined REC as project leader for a project to implement sales representative productivity. Responsible for Pharmaceutical Business Development in 1999. Head of Lercanidipine unit in 2002 and responsible for the setup of REC Ireland and UK. From 2007 responsible for European Subsidiaries Division. General Manager of Pharmaceutical Business from 2011. COO in 2013.	
Rosalba Casiraghi	Independent Director Non-executive	Degree in Business Administration (Bocconi University)	Official Registered Auditor. Started as cost accountant then became CFO. Director and auditor in companies operating in industrial and financial sectors, listed and unlisted.	Board member of two listed companies
Fritz Squindo	Managing Director and CFO Executive	Graduated in Economics at Bocconi University, Milan.	Head of Finance and Management Accounting in Sanofi S.p.A from 1986 to 1992. Joined REC as head of Management and Accounting department. Appointed CFO in 2005 and Managing Director in 2008.	
Michaela Castelli	Independent Director Non-executive	Degree in Law (University of Milan)	Member and/or President of several Supervisory boards and Boards of Directors, as well as company advisor.	Board member of one listed company
Paolo Fresia	Independent Director Non-executive	BA degree in Philosophy and Economics (University College London)	Sales trader at Goldman Sachs and then sustainability and corporate social responsibility consultant.	
Mario Garraffo	Independent Director Non-executive	Degree in Economics (Bocconi University)	Former controller and Development director, investment director, CEO (in several companies) and Chairman (of General Electric Italia). He was also Senior Advisor for General Electric Europe.	Independent Director of: - GE INTERBANCA SpA - Pitagora SpA - Quadrivio Capital Sgr
Marco Vitale	Independent Director Non-executive	Degree in Business Economics	Professor of business economy. Founding partner and president of Vitale-Novello & Co. Former consultant and member of the Board of Directors of many important companies. Has also been president of several foundations.	Director of: - Ermenegildo Zegna Holditalia SpA - Snaidero SpA - LUVE SpA - SMEG SpA - Banca Passadore SpA

Disclosures:

Ownership and material conflicts of interest

The authors, or a member of their household, of this report do not hold a financial interest in the securities of this company.

The authors, or a member of their household, of this report do not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Receipt of compensation

Compensation of the authors of this report is not based on investment banking revenue.

Position as an officer or a director

The authors, or a member of their household, does not serve as an officer, director, or advisory board member of the subject company.

Market making

The authors do not act as a market maker in the subject company's securities.

Disclaimer

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the authors to be reliable, but the authors do not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with Recordati S.p.A, CFA Institute, or the CFA Institute Research Challenge with regard to this company's stock.