

# Fresenius Medical Care AG & Co. KGaA (FME)

BUY: EUR€ 96.21 (+46.79%)

# Equity Research Department - Healthcare

31st October 2020

# **Analysts**

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## **Basic Information**

Ticker	XTRA:FME
Last Close (30-Oct-20)	EUR€65.54
12M Target Price	EUR€96.21
+/- Potential	+46.8%
GICS Sector	Healthcare
GICS Sub-Industry	<b>Equipment &amp; Services</b>

## 1Y Price Change vs. Relative Index (DAX)



## **Company Description**

Fresenius Medical Care is a global leader based in Germany in providing products and services for people with chronic kidney failure.

## **Kev Financials**

Market Cap

- · · · · ·				00000		
Basic Shares (	O/S	EUR€ 306.88b				
Free Float				64.6%		
52-Wk High-I	LOW	EUR€ 81	.10 – EUF	₹ 53.50		
Fiscal Year Er	nd		31-D	ec-2020		
(EUR€ M)	FY17A	FY18A	FY19A	FY20E		
Revenue	17,781	16,544	17,472	17,971		
Gr Rate (%)	4.4	(7.0)	5.6	2.9		
EBIT	2,267	2,184	2,218	1,834		
Margin (%)	12.7	13.2	12.7	10.2		
NPI	1,280	1,982	1,200	1,015		
Margin (%)	7.2	12.0	6.9	5.6		

# **Key Executives**

Rice Powell Chairman, CEO
Helen Giza Chief Financial Officer
Franklin W. Maddux Chief Medical Officer

We are initiating coverage of **Fresenius Medical Care ("FME" or "Company")** with a **BUY** rating and a 12M target price of **EUR €96.21**.

# **3Q20 Earnings Highlights**

- Healthcare Services revenue grew by 4% y-o-y, while Healthcare Products grew 5%.
- Peritoneal dialysis saw an 8% growth in patients treated, signalling a possible shift toward home therapies.
- Net income by 11%, beating consensus estimates.
- Number of treatments rose 3% while, patients treated grew 2%.

# **Investment Thesis**

- Poised for rapid growth in Chinese market The Chinese market is the world's second largest and shows strong potential in Tier 2 and 3 cities where dialysis is less accessible. FME has accelerated their penetration into the Chinese market, through stake acquisitions of existing companies and plans to set up renal centers and hospitals.
- Value Based Care to drive patient retention rates –
  Solidification of market leadership via unparalleled vertically
  integrated business model. Value-based care model is expected to
  drive market share growth via affordable renal care and an
  ecosystem of diagnostic support.
- **Primed for shifts toward home therapies** FME has begun targeting home therapies, a small segment of the market that has begun to gather momentum. Already equipped with the capacity to service demand, FME is well-placed to capitalise and establish a dominant market leadership in home-based therapies.

# **Catalysts**

- 2020 earnings are expected to well achieve management targets, reaffirming projections on FME's continued growth.
- Propagation of newly patented products may signal a successful shift towards incorporating home-based therapies both in the North American and other regions such as China.
- Reported increases in the uptake of home-based therapies in China would reaffirm a successful expansion into the currently under-supplied Chinese market.

# **Valuations**

EUR€ 20.512b

Our 12M target price at the date of coverage is **EUR€ 96.21**, consisting of a blend between a DCF valuation of EUR€ 85.74 and a blended multiple valuation of EUR€ 106.68.

#### **Investment Risks**

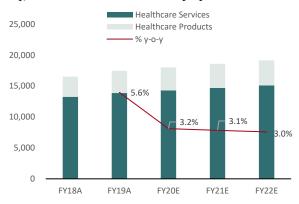
- FME remains prone to government policy changes and effects, particularly given the current pandemic.
- The risk of new technologies that usurp current established renal care products will always persist. Some new entrants to the market have proven successful.
- The shift toward home-based therapies as an alternative to more common, in-patient therapy may cannibalise current treatment figures.

Figure 1: FME's Operations by Major Geographic Locations



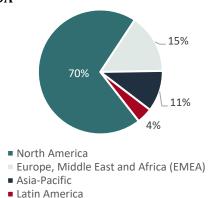
Source: Fresenius Medical Care (FME)

Figure 2: Revenue by Primary Segment (EUR€ M), Total Y-o-Y Growth Rate (%)



Source: Company Filings, Analyst Estimates

Figure 3: Revenue by Geographic Region, FY2019A



Source: Company Filings

# **Company Overview**

Fresenius Medical Care is the world's largest provider of dialysis and dialysis-related services, equipment and drugs, with the goal to provide dialysis products such as dialysis machines, dialyzers and related disposables. Beginning in 1912, Dr. Eduard Fresenius acquires ownership of a pharmacy in Frankfurt before relocating to Bad Homburg. In 1966, Fresenius begins sales of dialysis machines. From then on, Fresenius has begun production of its own infusion solutions, dialyzers and dialysis machines, listing on the New York and Frankfurt Stock Exchanges in 1996.

Currently, FME employs over 120,000 employees worldwide who have served over 348,000 patients and given over 52 million treatments in over 4,000 clinics across the world annually. One in two dialysis machines worldwide is made by FME, indicating strong trust and partnership with hospitals and among healthcare professionals.

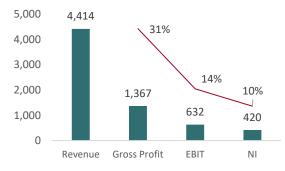
FME is headquartered in Bad Homburg, Germany, which also serves as the regional headquarters for the EMEA (Europe, Middle East and Africa) region. Regional headquarters for other geographies include Waltham, US (North America), Rio de Janeiro, Brazil (Latin America) and Hong Kong (Asia Pacific). A major portion of their revenue is derived from North America, where FME and DaVita, their main competitor, comprised over 90% of market share as of 2018.

FME mainly segments its revenue into Services and Products, both with a heavy emphasis on renal care and dialysis. Services mainly involve the diagnosis and care coordination for patients with renal disease, while Products are largely dialysis machines, dialyzers, solutions used in dialysis treatment and pharmaceuticals.

## **FY20 Earnings Review**

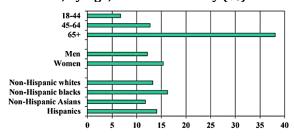
- Up to September 2020, FME's Healthcare Services revenue grew by 4% y-o-y, while Healthcare Products revenue growth was slightly stronger with a y-o-y growth of 5%.
- FME reported expansion in clinics by 2% to 4,073 clinics worldwide, a rise in treatments by 3% y-o-y to over 40 million treatments and a rise in number of patients by slightly above 2%.
- Peritoneal dialysis saw an 8% growth in patients treated, signalling an inclination towards more independent patient treatments and a possible shift toward home therapies.
- A rise in net income by 11% in spite of the COVID-19 pandemic was a confident showing of FME's ability to tide through the pandemic despite impacted services.
- COVID-19 continues to affect FME's businesses, but FME confirms mid-to-high single digit growth target rates in revenue for 2020.
- FME's organic growth dropped 3% for the quarter, attributed mainly to missed treatments and delayed referrals of patients due to the coronavirus.. However, we expect this to be a short-term dampener on growth considering the inflexible nature of dialysis treatment.
- 2% came from North America despite a sizable headwind from calcimimetics.

Figure 4: Earnings (EUR€ M), Margins (%)



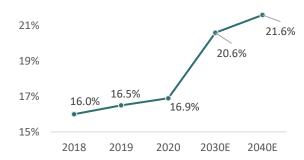
Source: Company Filings

Figure 5: Estimated Proportion of US adults with CKD, by Age, Sex and Ethnicity (%)



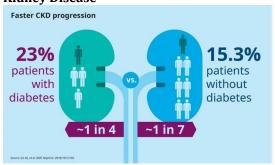
Source: Centre for Disease Control and Prevention

Figure 6: Share of US Population Aged 65 and Older (%)



Source: Statista

Figure 7: Diabetes a Comorbidity of Chronic Kidney Disease



Source: IQVIA

# **Industry Outlook**

The renal market is poised to continue growing at a steady rate as the growing prevalence of kidney disease weighs on an ageing population.

## Resilient growth of the renal market

In 2018, the global renal dialysis market was worth approximately USD\$ 17,923.45m and is forecasted to register a CAGR of 8.1% till 2025. The largest share in the market is expected to be held by North America, followed by Europe and Asia Pacific.

The prevalence of Chronic Kidney Disease (CKD) has risen by about 29.3% since the 1990s. The National Kidney Foundation has reported that CKD affects approximately 10% of the world's population, which translates to close to 780 million cases worldwide.

In particular, the prevalence of CKD experiences exponential growth among older age groups, with 38% of adults in the US expected to have CKD currently. The ageing population is expected to place more individuals at risk of being diagnosed with CKD as kidney functions decline. Within the US alone, it is expected that nearly one in four Americans will be aged 65 and above by 2050.

Presently, approximately 4.35 million people are receiving treatment with dialysis or are getting a kidney transplant. With more education efforts and awareness of this disease by government authorities and health organisations, there have also been rising numbers of patients going for kidney dialysis. The number of patients going for kidney dialysis and patients waiting for a transplant are also expected to rise over time.

## Diagnoses rates to gather momentum

In the US alone, the Centre for Disease Control and Prevention (CDC) estimate that 9 in 10 adults with CKD remain unaware that they have it. The risks of an ageing population is also exacerbated by comorbidities such as diabetes mellitus, hypertension, heart disease and stroke. Comorbidities are slated to boost the demand for dialysis where 1 in 3 patients diagnosed with diabetes mellitus are also consequently diagnosed with CKD and where hypertension accounts for 21% of CKD cases.

A large portion of CKD patients remain undiagnosed, although the growing rate of CKD prevalence suggests this number is expected to dwindle as comorbidities and health complications accelerate diagnoses.

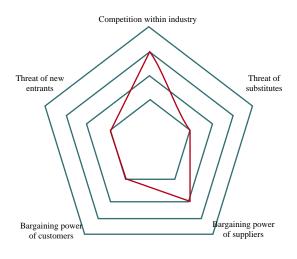
## Strong Demand for Home Dialysis Segment in North America:

On July 10, 2019, the Trump Administration announced a set of sweeping statements under the "Advancing American Health Initiative, with one being the move towards incentivising home dialysis in the US. As reported in the initiative's progress report for 2020, this will be accomplished by "Releasing a proposed rule to establish the ESRD Treatment Choices Model, designed to increase rates of home dialysis and transplantation by adjusting payment incentives for managing clinicians and ESRD facilities". Moreover, this has been boosted by current trends in telehealth, as telehealth being one of the building blocks that are necessary in the transition into Home Dialysis.

Telehealth and the remote monitoring of dialysis patients has become more commonplace in the past decade, where telehealth is used widely for patients receiving home dialysis.

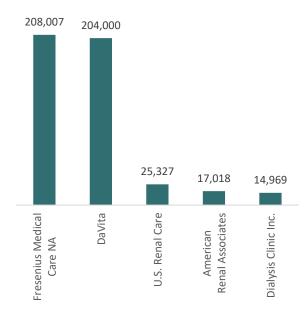
The telehealth market is slated for significant growth with an exceptional CAGR of 25.2% till 2027 with North America being the largest contributor to the market growth. The cost effectiveness and convenience from telehealth and remote monitoring could also

Figure 8: Porter's 5 Forces, FME



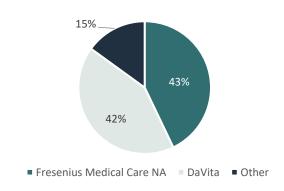
Source: Analyst Estimates

Figure 9: Top 5 Dialysis Providers in the US by number of patients, 2019



Source: Statista

Figure 10: US Dialysis Market Share by Number of Patients, 2019 (%)



Source: Statista

continue to encourage uptake and rapid growth of home therapies as there is improved collaboration among physicians, the clinical care team and patients.

Telehealth is also able to enable the various healthcare players to reach out to individuals with less mobility, expanding range and accessibility to patients needing healthcare services. Moreover, telehealth may be able to reduce the visits made by low-risk patients, reducing the waiting times to seek treatment and increase bed space, and mitigating the risks commonly associated with out-patient, home dialysis.

The trends caused by COVID 19 are also obvious in pushing certain treatments such as dialysis to a home setting in North America. This includes dialysis. The Center for Disease Control and Prevention has given guidance to the general population as well as healthcare providers that have been affected by COVID 19 to adopt social distancing practices, specifically recommending that healthcare facilities and providers offer clinical service through virtual means such as telehealth. They have observed following this guidance that the 154% increase in telehealth visits during the last week of March 2020, compared with the same period in 2019 might have been related to pandemic-related telehealth policy changes and public health guidance.

## **Porter's Five Forces**

We use Porter's 5 Forces to concisely assess FME's competitive landscape. FME faces competition in international markets, but its position as a global brand will prove to be a heavy leverage point.

## Competition within industry - High

Within the US, the dialysis industry is largely consolidated, with Davita and FME holding near 90% of market share for dialysis centres. However, Baxter techniques were found to have slightly higher technique survival rates in peritoneal dialysis. FME holds a less dominant position in the manufacturing space.

Globally, FME is faced with major players in various continents, such as Diaverum S.a r.l. which operates in Europe, the Middle East and Africa (EMEA) and Latin America, and Nephrocare Health Services Private Limited in Asia Pacific. Still, FME also continues to enjoy a strong reputation as the world's "largest provider of dialysis services and dialysis products" and maintains a strong influence over the global renal market.

#### Threat of new entrants - Low

FME continues to hold a strong patent portfolio – 10,658 property rights in approximately 1,518 patent groups linked to the same invention. Proprietary know-how in terms of product manufacturing and in continuously obtaining targeted patent protection for newly developed upgraded products will allow them to maintain a competitive advantage.

FME's haemodialysis products continues to offer intra-category offerings - the 2008, 4008, 5008 and 6008 machines, an assurance of quality and technological development. The 4008 and 5008 series were developed for markets beyond North America whereas 2008 series was created for the North American market.

# Threat of substitutes - Low

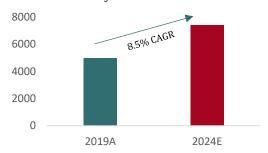
At present, the only true alternative to dialysis treatment is a kidney transplant, of which supply is sorely lacking. Moreover, in its move towards renal continuum care and with the recently completed acquisition of NxStage, FME is also able to increase its home hemodialysis treatment options and facilitate dialysis at home as part of their focus on capturing dollars by value.

Figure 11: Fresenius 6008 CARESystem Hemodialysis Machine



Source: Fresenius

Figure 12: China's Renal Market Expected to Run to USD 7.4 by 2024



Source: marketsandmarkets.com

Figure 13: FME's Outposts in China



Source: Fresenius

Figure 14: Tier 2 and Tier 3 Cities in China



Source: South China Morning Post

## **Bargaining power of customers - Low**

Given that FME operates a duopoly with DaVita for dialysis services and provides up to 50% of the world's dialysis machines, buyer's will find it difficult to influence price points. Furthermore, given the necessity of regular, frequent dialysis treatments, customers will not be inclined to switch provider so quickly.

## **Bargaining power of suppliers - Moderate**

FME depends on a few suppliers in the market for raw materials for production and services and has been working to engage at least two suppliers to all supply and price-critical primary products. FME is considerably dependent on their suppliers.

## **Investment Thesis**

## 1. Poised for rapid growth in Chinese market

Since 2017, FME has made a noticeable effort to accelerate their penetration of the Chinese market with an estimated 45% of the population having CKD, and which reportedly lack affordable life-saving kidney dialysis treatments, especially in rural areas beyond major cities. Prior to recent developments in treatments, dialysis and transplant surgery have been regarded as expensive and were mainly afforded by government cadres or the more affluent. This provides an opportunity for entry into the market and FME has targeted primarily these underdeveloped areas as a preliminary move.

With a focus on R&D on cost-effectiveness in the tier 2 and 3 cities lacking state support, FME launched the 4008A dialysis machine with its China Design Centre in Shanghai. The 4008A is meant to be affordable, easily handled and operable even in remote areas. The 4008A has thus far been reported to be able to reduce the treatment gap faced by underserviced individuals requiring dialysis but are not receiving it out of inaccessibility and unaffordability. To top it off, FME's focus on education had also spurred the establishment of a training centre for nurses and doctors, since they identified a shortage in such healthcare professionals particularly in areas beyond major cities. With more professionals particularly in the tier 2 and 3 cities on the ground who could refer patients to their cost-effective dialysis treatments, FME is able to appear as a more reliable kidney dialysis provider and raise its market leadership within the Chinese market.

FME has propagated through the strategic acquisition of stakes in Chinese companies with dialysis centres operating in the Henan, Shandong, Guangdong, Heilongjiang and Sichuan provinces. Notably, in 2018, FME announced a 70% share of Guangzhou KangNiDaiSi Medical Investment Co., Ltd that operates three independent haemodialysis centers in Guangzhou and Zhaoqing, and of Sichuan Hejiang Kangcheng Renal Hospital and Sichuan Ziyang Zhongxin Hospital. Following this, FME is en-route to opening 100 renal hospitals and dialysis centres in China over the next few years, which is in-sync with the Chinese government's 'Healthy China 2030' vision which involves developing professional dialysis centres.

By setting up operations in China, gaining insights on the Chinese market and engaging in more R&D in emerging markets, FME is able to provide even more innovative and cost-effective solutions for treating kidney disease, priming it to expand from these regions into the larger Chinese market.

FME is able to leverage on their expertise in providing superior treatment and provide the products that the identified cities need, and thereafter achieve their vision to be the leader and preferred partner in managing care, and at the same time begin positioning itself to take further steps to capture the rest of the market as it establishes a presence in China with its haemodialysis and peritoneal dialysis

Figure 15: FME's Value Based Care Model



Source: Fresenius

Figure 16: Interwell Health Business Model



Source: Fresnius, Interwell Health

Figure 17: NxStage System One, Fresenius' Flagship home dialysis product



Source: Fresenius

market projected to grow at a CAGR of 8.5% until 2024 to an estimated market size of USD 7.4 billion.

## 2. Value Based Care to drive patient retention rates

FMS has shown to provide value centric products that are aligned with market trends, especially through their ability to vertically integrate.

FME possesses an ecosystem with deep links to both physicians as well as nephrologist networks. This ecosystem is well demonstrated with the partnership between Interwell Health and Fresenius Medical Care, holding a 50-50 share in governance and funding. Interwell health aims to maintain its position as a long term player in providing value based, holistic care coordinated by a network of physicians and aligns with FME's aim to develop deep links with patients via an all-rounded treatment delivery. Through this, FME will be able to greater retain patients' use of their services, through an "integrated connected care experience", which aims to provide a holistic clinical approach to the patient transcending the flat selling of dialysis products and provision of renal care services.

Like all lifestyle changing diseases, patients with chronic renal disease face social and clinical challenges, such as choosing the right therapy, staying connected to their nephrologists, as well as social support. With a 6 pronged approach, FME continues to address such issues by "increasing patient intimacy" through virtual means either through telehealth platforms where the patient care team can provide social support, as well as allowing for virtual monitoring of comorbidities and the condition of the patient by the nephrologists. What these point to is an approach to provide patients and medical experts the ability to better tailor and adjust the patient's clinical experience and address not just renal disease, but comorbidities and social issues that the patient faces, going above and beyond a medical device provider's call of duty in the industry.

With a strong network of physicians and deep roots in the industry, FME has the ability to draw greater insights into the needs and demands of patients, to tailor both dialysis products, as well as their service care segments. Furthermore, the data obtained from the rapport built with their customers provides them with the potential for a strong direction and focus in their R&D as well as supply chain processes, driven by data analytics and AI. This proficiency with the market allows FME to further enhance their position as the market leader in dialysis products. Patients will be able to obtain diagnostics, prescriptions and more consolidated care that aims to eliminate the gaps between each facet of renal treatment, all at a standard rate.

FME is the only player in the industry that is able to achieve this level of vertical integration by virtue of its size and production expertise.

# 3. Primed for shifts toward home therapies

Home-based dialysis has often been a small segment of the market owing to the nature of in-centre treatment being a more viable, less risky option for older patients, of whom make up the majority of dialysis patients. However, home-based dialysis treatments have seen a surge in uptake since 2008 according to a 2019 report by the United States Renal Data System, 10.1% of all ESRD incidence in the US began (outpatient) peritoneal dialysis treatment. 2017 showed 27.8% of those aged under 21 and 14.9% of patients ages 22-44 years of age opted for peritoneal dialysis, despite only 8.8% to 10.1% of prevailing patients using peritoneal dialysis in the same age groups.

As of 2019, FME treats a majority of its patients through in-center treatment, with less than 1% of its treatments on a home haemodialysis basis. In the North American Market, only Nxstage and Fresenius produce home dialysis machines approved for sale in the US. Quanta, their closest competitor, has not received FDA clearance.

Figure 18: Biofine, Sustainable Polymer for Homebased Renal Therapy



Biofine® is a seven-layer polymer constructed from hydrogen and carbon atoms. Some of its advantages are:

PVC-free and plasticizer-free

Requires the use of less material (60% thinner than PVC)

Generates less waste

Does not release hydrochloric acid upon incineration

Less energy needed for production

Can be easily recycled

Source: Fresenius

Figure 19: Locations of Centers that are Operational for Transitional Care



Source: NxStage

Given the strong tailwinds as described before, FME is in the prime position to continue to seize more of the renal market.

FME is currently the leader in supply side capabilities in the US. With regard to Home Dialysis, FME has added capabilities due to the recent NxStage merger in 2019 as well as added capabilities in Mexico and a highly automated solutions facility recently opened in Tennessee, US. This is expected to grant a stiff 40% boost in production capacity. The completion of the plant this year aims to produce their most recent FDA approved product in October 2020; Biofine, an environmentally friendly polymer used in the production of peritoneal dialysis solutions bag aimed at a sustainable home dialysis treatment.

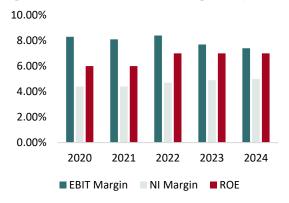
There are several building blocks that are required in order to be successful in the home dialysis business, as pointed out by FME. FME continues to invest in transitional care units. With many already operating and over a hundred more to come in within the year, we believe that Fresenius is able to utilize its networks to fully onboard patients in the US towards a home based setting. Transitional care units aim to prepare and educate patients on how to use their home dialysis machines, to boost their confidence and assimilate their dialysis into the home. We believe that with the vast networks Fresenius possess, we believe that FME "ensuring that over 90% of our patients are within 15 miles of a training centre", put by William Valle, FME's chief medical officer, is something that cannot be replicated by any other player in the industry.

Overall, FME has demonstrated that it is prepared to move into the home dialysis segment, and fully utilize the structural tailwinds of a COVID-19 renal market and beyond.

## **Catalysts**

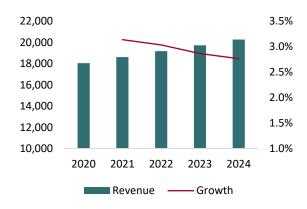
- We fully expect Fresenius Medical Care to hit its revenue and earnings targets for 2020. A positive surprise on market analyst consensus would affirm our projections on FME's continued growth.
- We expect FME to continue its development of home-base renal therapies and the propagation of its Biofine technology. At the current time, Biofine is intended to be available on a selective basis in the North American region only. We expect a successful entry into the NA market this fall, signalled by more widespread sales or initial availability to other major regions such as China.
- The expansion into the Chinese market has shown promise in rural areas. Further acquisitions in more developed areas will signal FME's intention to gain momentum in growing their position in the under-supplied Chinese market.

Figure 20: ROE, EBIT and NI Margin Projections



Source: NUS Investment Society Estimates

Figure 21: Strong Revenue Growth Projected Forward



Source: NUS Investment Society Estimates

# **Financial Analysis**

10001			2022E	2023E	2024E
1/6.6 17	7,970.8	18,461.4	18,943.7	19,404.3	19,855.2
18.2 1,	834.8	1,597.4	1,736.9	1,689.4	1,618.1
7% 10	0.2%	8.7%	9.2%	8.7%	8.1%
99.6 1,	014.6	884.2	989.4	1,081.2	1,074.4
% 5.	6%	4.8%	5.2%	5.6%	5.4%
6 7.	.1%	5.9%	6.2%	6.3%	5.9%
1 3.	.31	2.88	3.22	3.52	3.50
	18.2 1,7% 10 99.6 1,7% 5.7% 5.7% 1 3.8%	18.2 1,834.8 7% 10.2% 99.6 1,014.6 % 5.6% % 7.1% 1 3.31	18.2     1,834.8     1,597.4       7%     10.2%     8.7%       99.6     1,014.6     884.2       %     5.6%     4.8%       6     7.1%     5.9%       1     3.31     2.88	18.2     1,834.8     1,597.4     1,736.9       7%     10.2%     8.7%     9.2%       99.6     1,014.6     884.2     989.4       %     5.6%     4.8%     5.2%       %     7.1%     5.9%     6.2%       1     3.31     2.88     3.22	7%       10.2%       8.7%       9.2%       8.7%         99.6       1,014.6       884.2       989.4       1,081.2         %       5.6%       4.8%       5.2%       5.6%         %       7.1%       5.9%       6.2%       6.3%         1       3.31       2.88       3.22       3.52

In EUR€ M, except per share values

#### **Overview**

The chart above reveals Fresenius Medical Care's financial condition prospects for the next five years, highlighting our assumptions. Most indicators yield positive and favourable trends that are supportive of the overall BUY recommendation.

## **Profitability Ratios**

We expect FME's EBIT and Net Income margins to remain strong over the next few years, however, we expect to see a slight slowdown that comes from headwinds by the COVID-19 crisis. Moving forward, as FME continues to tap on their strong vertically integrated care to provide a strong, data driven and focused R&D processes that come from such vertical integration. EBIT is expected to remain dampened from the onset of structural difficulties instilled by COVID-19. We view this temporary drag on bottom line as a necessary cost of an overall bigger, that eventually translates to a better ROE as FME grows larger as a global leader of renal care and renal products.

FME has continued to see strong revenue growth in the previous years. A one-time fall in revenue in 2018 was attributable to governmental restrictions that hindered access to tenders which FME has expected, as well as market risks that came from hyperinflation in Argentina. Still, revenue is expected to gain across all segments for 2020, and we expect this growth to carry through over the next 5 years, buoyed by burgeoning demand for renal care in emerging markets.

Looking forward, we continue to see strong revenue growth in the coming years that is driven by the continuous development of home dialysis in North America as well as strong growth in Hemodialysis and Peritoneal Dialysis segments in APAC and Latin America. Moreover, the continuous development of the Value Based Care approach as a product portfolio grants FME better adaptability to trends in healthcare reimbursements internationally. For example, in countries where reimbursements are low (e.g. India), Value Based care grants FME the ability to adapt to such market trends to continue to cement their growth in such countries. In this respect, we expect to see better growth but slightly higher R&D and SG&A expenses as FME works to capture these markets and push the Value Based care model.

Figure 22: Football Field Analysis

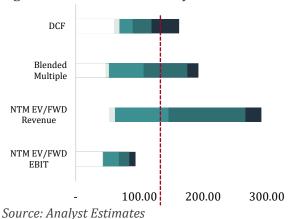
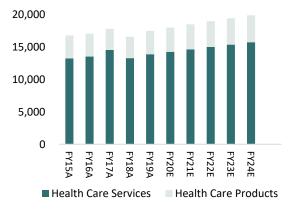


Figure 23: Revenue by Business Segments, Health Care Services revenue still majority



Source: NUS Investment Society Estimates

Figure 24: Free Cash Flow to Firm

0	
DCF Valuation (Terminal Growth)	
Enterprise Value	37,699
Less: Debt	(9,115)
Less: Lease Liabilities	(4,705)
Add: Cash and Cash Equivalents	1,163
Add: Minority Interest	1,269
Market Value	26,312
Current Price	65.54
Outstanding Shares (mln)	306.88
Share Price (EUR)	85.74

Source: NUS Investment Society Estimates

Figure 25: Sensitivity Analysis

				WACC		
		3.85%	4.35%	4.85%	5.35%	5.85%
	1.6%	129.51	99.70	79.08	63.97	52.43
	1.7%	136.59	104.31	82.30	66.34	54.24
Terminal Growth %	1.8%	144.36	109.28	85.74	68.85	56.14
	1.9%	152.93	114.66	89.41	71.50	58.13
	2.0%	162.43	120.50	93.34	74.31	60.23

Source: NUS Investment Society Estimates

Figure 26: WACC Calculation

WACC Buildup	
Risk Free Rate	0.33%
Levered Beta	0.98
Market Risk Premium	5.9%
Cost of Equity	6.13%
Proportion of Equity	61.0%
Cost of Debt	3.34%
Proportion of Debt	39.0%
Tax Rate	15.0%
WACC	4.85%

Source: NUS Investment Society Estimates

## Valuation

We weighted our DCF valuation of EUR€ 85.74 and blended multiple valuation of EUR€ 106.68 at a weightage of 50:50. Valuation Price Target: **EUR€ 96.21.** 

#### **DCF Model**

We used a DCF model to derive an intrinsic value of FME's share price. Our DCF model forecasts over a period of 5 years, and we largely projected operating expenses to maintain at their current or average margin levels. However, we felt that the structural headwind of the pandemic-stricken market, and lower subsidies on certain less-essential pharmaceuticals would raise gross margins slightly. R&D expenses were also expected to rise with FME currently pushing heavily for new home-based renal therapy products. We also assumed that FME would continue to service their expansion strategy with cash acquisitions.

The DCF model was built with current year quarterly results and the recent Q3 earnings call as guidance on growth estimates. Where there was no evidence to the contrary, we held historical balance sheet ratios and turnovers to be constant.

## **Revenue projections**

Our revenue model assumes that revenue growth is driven by the growth of diagnosed, prevalent kidney disease cases. With that, we continued to project expected revenue per treatment, yearly number of treatments per patient and the total number of patients treated by FME for an expected revenue from healthcare services. We assumed that product revenue followed the same drivers as both products and services offered are often provided in conjunction and are very largely interrelated. We separated revenue by geography, with North America being a mature market and also the largest market, and the EMEA, APAC and LatAm regions experiencing higher growth rates. Revenue per treatment in all segments showed either non-material changes or a clear linear trend, which we adjusted where appropriate. Number of treatments per patient showed little variation. We understood this to be the due to the regularity of dialysis treatments, generally tending to be 3-4 times a week.

## **Revenue Growth**

Revenue growth under our projections very closely follows the rate at which kidney disease is becoming prevalent, particularly end-stage renal disease (ESRD), where besides a transplant, dialysis remains the only solution. We do not expect major shifts in market share in the North American region. Our estimates are consistent with management guidance for other operating geographies. Overall we expect a revenue growth rate of 2.1% for FY2020 year-on-year, and a CAGR of 2.1% for the next 5 years.

# WACC

The CAPM was used to estimate Cost of Equity. The risk-free rate was taken to be the 5Y US Treasury yield, adjusted to Euros using both regions' long-term inflation rates to account for FME's Euro-denominated financial statements and subsequently the cash flows derived for calculation of enterprise value. This gave us a risk-free rate of 0.334%.

The equity risk premium was derived using the implied equity premiums for each major geographic region and then weighted by contribution to revenue, to reflect the risks of operating in those regions. The weighted average premium cam to 5.89%. Beta was calculated using a comparable set of companies with similar industries, operating regions, products and size. The D/E ratio was used to un-lever the levered beta for each company selected to derive each unlevered beta. We took the median unlevered beta for the set and re-levered it with FME's D/E ratio to derive an adjusted levered

Figure 27: Beta Calculation

Beta	
Debt Ratio	39.0%
D/E	78.4%
D/E Beta	0.89
Adjusted Beta	0.98

Source: NUS Investment Society Estimates

Figure 28: Equity Risk Premium

Country	Revenue	Contribution	Tax Rate	Equity Risk Premium
North America	11,810	70.6%	21.0%	5.23%
Europe, Middle East and Africa (EMEA)	2,369	14.2%	22.5%	7.07%
Asia-Pacific	1,353	8.1%	16.5%	6.26%
Latin America	1,202	7.2%	32.0%	9.64%
Total	16,734			

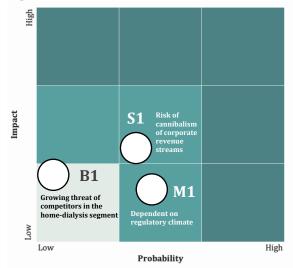
Source: NUS Investment Society Estimates

Figure 29: Terminal Growth Rate

Tigure 271 Terminar arowan	110100	
Terminal Growth		
	Growth Rate	Contribution
North America	1.8%	71%
Europe, Middle East and Africa (EMEA)	1.3%	14%
Asia-Pacific	2.4%	8%
Latin America	2.2%	7%
Weighted Perpetual Growth Rate	1.81%	

Source: NUS Investment Society Estimates

Figure 30: Risk Matrix



Source: Analyst Estimates

beta of 0.98, weighted 50:50 with the beta of 1.08 extracted from Capital IQ.

Our derived cost of equity was 5.79%. The cost of debt was taken to be the weighted average cost of debt for FME's existing debt: 3.34%. Using a corporate tax rate of 15% and D/E of 78.4%, the weighted average cost of capital was calculated to be 4.85%.

## Terminal growth

We used the Gordon Growth Method for our terminal growth rate. The long-term growth rate for each segment was taken from the IMF, and weighted by revenue contribution, to give a terminal growth rate of 1.81%.

#### **Relative Valuation**

We used 2 main multiples for our relative valuation: NTM EV/FWDEBIT and NTM EV/FWD Revenue. We chose NTM EV/FWD EBIT after observing a heavy difference in capital structure between our comparable companies. D&A proved to be a real operating cost, particularly with the production and sale of renal care products. We chose NTM EV/FWD Revenue for similar reasons. Moreover, revenue correlated very strongly with the performance of dialysis providers, considering the high retention rate of customers.

We used the median implied enterprise value for each of these multiples and adjusted to equity value, weighting both implied equity values 50:50. Our blended multiple price per share came to EUR€ 106.68.

## **Investment Risks**

#### Market Risk (M1)

Dependent on regulatory climate: Internationally, FME continues to drive their business segments through tender based procurement. Whilst they still continue to possess the competitive edge through their value based care approach, they are still at the mercy of government healthcare policies. Given the large global footprint that FME possess, the risk is multiplied. The constant need to tailor their products between value based care and traditional care given the context of the healthcare reimbursement policies on an international scale may pose top line drag in the company's products, as they may be unable to efficiently accommodate the needs of the international market. We find that this risk is inherent in any climate, and has been well accounted for in our valuations.

## Business Risk (B1)

Growing threat of competitors in the home-dialysis segment: Quanta, producer of the closest competitor FME' home dialysis products, currently has approval for sale in the UK and Europe. Entrance into the US market granted by FDA approvals may very well contribute to hindered revenue growth. However, given this competitive risk, much action is being taken by FME to ensure product differentiation through the emphasis on value based care.

However we feel the risk posed by new entrants is low. The sheer size of FME is not easily challenged, and the technology FME possess is also a function of its size and expertise in the industry. To reduce that gap would mean to negate several decades of research into renal care and we feel this is unlikely even with the availability of data found on the internet and through research papers.

# Strategic Risk (S1)

**Risk of cannibalism of corporate revenue streams:** In-center dialysis as well as home based dialysis are two mutually exclusive therapy choices. It is such that the home based dialysis trend in the US as pointed out in this report could potentially cannibalise the revenue streams of in-center treatment. We argue that FME has taken

appropriate action to ensure that revenue streams will continue to stay strong in the coming year. This is for two reasons. The first is that there is a continued emphasis on development internationally, where the primary modality of treatments is in-center. This is with reference to the 2019 Annual Medical Report. The second reason is that the promises of home based dialysis that takes place in the US is highly integrated into the Value Based Care approach, where FME continues to deliver higher quality care despite the home based treatments, and this stems from developments in telehealth, as shown in their partnership with Livongo for remote health services, as was as Interwell Health, for a deep network into physicians and private practicing nephrologists to continue to gain further market insights.

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# **Appendix**

# **Pro Forma Financial Statements**

in millions of EUR 12 months Income Statement Dec-26-2015 Dec-31-2016 Dec-30-2017 Dec-29-2018 Dec-28-2019 Dec-2020E Dec-2021E Dec-2022E Dec-2023E Dec-2024E 15,454,9 16.569.7 17.783.6 16.546.9 17,476.6 17,970.8 18.461.4 18.943.7 19,404.3 19,855.2 Revenue Other Revenue 15,454.9 16,569.7 17,783.6 16,546.9 17,476.6 Total Revenue 17,970.8 18,461.4 18,943.7 19,404.3 19,855.2 Cost Of Goods Sold 10,277.7 10,953.8 11,765.3 11,392.1 12,080.7 12,627.6 13,259.9 13,508.5 13,926.8 14,360.8 Gross Profit 5,177.2 5,615.9 6,018.3 5,154.7 5,395.9 5,343.2 5,201.5 5,435.2 5,477.6 5,494.3 Selling General & Admin Exp. 2,894.8 3,132.7 3,640.5 2,856.8 3,009.6 3,292.7 3,382.6 3,471.0 3,555.4 3,638.0 R & D Exp. 128.1 146.5 111.0 114.1 168.0 215.6 221.5 227.3 232.9 238.3 Other Operating Expense/(Income) Other Operating Exp., Total 3,022.9 3,279.2 3,751.5 2,970.9 3,177.7 3,508.4 3,604.1 3,698.3 3,788.2 3,876.2 Operating Income 2.336.7 1,736.9 2,154.2 2.266.8 2,183.8 2,218.2 1.834.8 1.597.4 1,689.4 1,618.1 (457.9) (448.5)(250.2)(238.8)Interest Expense (426.8)(416.2) (491.1)(426.8)(404.9)(400.0)Interest and Invest. Income 147.4 107.1 105.1 90.2 145.6 195.2 63.4 51.4 61.6 74.6 (364.8)(429.4) (352.2) (314.7) Net Interest Exp. (352.8)(363.4)(301.1)(292.9)(104.6)(43.6)Income/(Loss) from Affiliates 28.3 58.6 67.2 73.7 73.7 73.7 73.7 73.7 73.7 73.3 Other Non-Operating Inc. (Exp.) 1,829.8 2,032.0 1,969.2 1,956.1 1,862.4 1,556.3 1,356.4 1,517.7 1,658.4 1,648.1 EBT Excl. Unusual Items **Restructuring Charges** (91.7)Impairment of Goodwill Gain (Loss) On Sale Of Assets 28.8 13.5 25.8 809.0 Asset Writedown (64.7)(0.9)Legal Settlements (54.1)Other Unusual Items 36.3 41.5 EBT Incl. Unusual Items 1,775.7 2,045.5 1,997.6 1,840.1 1,556.3 1,356.4 1,517.7 1,658.4 1,648.1 2,736.7 **Income Tax Expense** 565.0 625.4 443.1 511.1 401.6 339.7 296.0 331.2 362.0 359.7 1,420.1 1,438.5 1,216.7 1,296.5 Earnings from Cont. Ops. 1,210.7 1,554.5 2,225.7 1,060.3 1,186.4 1,288.4 **Minority Int. in Earnings** (255.7)(276.1) (274.7)(243.7)(238.9) (202.1)(176.1)(197.0)(215.3)(214.0)

1,981.9

1,199.6

1,014.6

884.2

989.4

1,081.2

1,074.4

Net Income

954.9

1,144.0

1,279.8

lions o	

in millions of EUR										
Balance Sheet	12 months Dec-26-2015	12 months Dec-31-2016	12 months Dec-30-2017	12 months Dec-29-2018	12 months Dec-28-2019	12 months Dec-2020E	12 months Dec-2021E	12 months Dec-2022E	12 months Dec-2023E	12 months Dec-2024E
	Dec-26-2015	Dec-31-2016	Dec-30-2017	Dec-29-2018	Dec-28-2019	Dec-2020E	Dec-2021E	Dec-2022E	Dec-2023E	Dec-2024E
ASSETS										
Cash, Cash Equivalents & ST Investmen	n 770.4	974.7	993.6	2,265.1	1,163.3	1,653.4	1,752.4	2,293.2	3,204.8	4,165.5
,				_,	-,	-,	_,	_,	-,	-,
Accounts Receivable	3,326.5	3,700.5	3,501.0	3,430.4	3,580.5	3,681.8	3,782.3	3,881.1	3,975.5	4,067.9
Other Receivables	500.6	438.7	195.2	335.2	388.7	399.7	410.6	421.4	431.6	441.6
Total Receivables	3,827.1	4,139.3	3,696.2	3,765.6	3,969.3	4,081.5	4,192.9	4,302.5	4,407.1	4,509.5
					4 4 4 0 0	4 2400	4 === 0	4.000.0	4044	4 000 #
Inventory	1,234.5 67.7	1,337.5 71.0	1,290.8 72.9	1,466.8 81.0	1,663.3 46.2	1,710.3 51.0	1,757.0 52.4	1,802.9 53.7	1,846.7 55.0	1,889.7 56.3
Prepaid Exp. Other Current Assets	332.4	361.5	320.9	268.4	323.2	332.3	341.4	350.3	358.8	367.1
Total Current Assets	6,232.0	6,883.9	6,374.3	7,846.9	7,165.1	7,828.5	8,096.0	8,802.6	9,872.5	10,988.1
Total cul Felic Assets	0,232.0	0,003.9	0,374.3	7,040.5	7,103.1	7,020.3	0,0 50.0	0,002.0	9,072.3	10,900.1
Gross Property, Plant & Equipment	6,821.5	7,745.0	7,655.4	8,507.4	14,413.4	15,581.5	16,793.6	18,049.8	19,349.3	20,692.4
Accumulated Depreciation	(3,667.4)	(4,165.3)	(4,163.6)	(4,671.4)	(5,898.0)	(7,412.6)	(9,027.5)	(10,746.3)	(12,572.6)	(14,510.1)
Net Property, Plant & Equipment	3,154.1	3,579.6	3,491.8	3,836.0	8,515.4	8,168.9	7,766.1	7,303.5	6,776.7	6,182.3
Long-term Investments	593.6	598.2	647.0	649.8	696.9	1,236.0	1,789.8	2,358.1	2,940.3	3,535.9
Goodwill	11,999.9	12,955.6	12,103.9	12,209.6	14,017.3	14,017.3	14,017.3	14,017.3	14,017.3	14,017.3
Other Intangibles	764.7	803.1	683.1	681.3	1,426.3	1,466.7	1,506.7	1,546.1	1,583.7	1,620.5
Accounts Receivable Long-Term	4500	15.1	90.3	120.7	132.1	132.1	132.1	132.1	132.1	132.1
Deferred Tax Assets, LT	173.9	291.4	315.2	345.7	361.2	361.2	361.2 655.4	361.2 672.5	361.2	361.2
Other Long-Term Assets Fotal Assets	436.9 23,355.1	376.7 25,503.5	319.6 24,025.2	552.3 26,242.3	620.4 32,934.7	638.0 33,848.7	34,324.7	35,193.4	688.9 36,372.6	704.9 37,542.2
I Otal Assets	23,333.1	23,303.3	24,023.2	20,242.3	32,734.7	33,040.7	34,324.7	33,173.4	30,372.0	37,342.2
LIABILITIES										
Accounts Payable	719.0	839.6	631.0	702.9	756.2	834.9	857.7	880.1	901.5	922.4
Accrued Exp.	1,246.6	1,235.0	1,475.1	1,436.9	1,104.4	1,219.3	1,252.6	1,285.3	1,316.6	1,347.1
Short-term Borrowings	118.1	575.0	845.4	1,426.6	1,209.9	752.6	229.1	-	-	
Curr. Income Taxes Payable	67.0	123.3	50.5	68.2	101.8	-	-	-	-	-
Unearned Revenue, Current	-	-	-	37.6	22.8	-	-	-	-	
Other Current Liabilities	1,056.6	1,801.7	1,414.3	1,489.5	1,726.2	1,905.8	1,957.9	2,009.0	2,057.9	2,105.7
Total Current Liabilities	3,207.4	4,574.7	4,416.4	5,161.8	4,921.3	4,712.6	4,297.2	4,174.4	4,275.9	4,375.3
Long-Term Debt	7,845.2	7,514.7	6.641.7	6.115.9	7,905.6	7,905.6	7,905.6	7,905.6	7.905.6	7,905.6
Long-Term Leases	7,043.2	43.8	37.7	36.1	4,705.0	4,705.0	4,705.0	4,705.0	4,705.0	4,705.0
Pension & Other Post-Retire. Benefits	538.9	512.5	530.6	551.9	689.2	760.9	781.7	802.1	821.6	840.7
Def. Tax Liability, Non-Curr.	575.0	661.9	467.5	626.5	739.7	739.7	739.7	739.7	739.7	739.7
Other Non-Current Liabilities	577.5	1,144.8	1,103.1	848.1	746.8	824.5	847.0	869.1	890.2	910.9
Total Liabilities	12,744.0	14,452.4	13,197.0	13,340.3	19,707.5	19,648.3	19,276.2	19,195.9	19,338.1	19,477.2
Common Stock	356.5	307.2	308.1	307.9	304.4	304.4	304.4	304.4	304.4	304.4
Additional Paid In Capital	3,195.3	3,960.1	3,969.2	3,873.3	3,607.7	3,607.7	3,607.7	3,607.7	3,607.7	3,607.7
Retained Earnings	7,247.2	6,085.9	7,137.3	8,831.9	9,454.9	10,226.0	10,898.0	11,649.9	12,471.6	13,288.2
Treasury Stock	(465.0)	(51.0)	(108.9)	(51.0)	(370.5)	(370.5)	(370.5)	(370.5)	(370.5)	(370.5)
Comprehensive Inc. and Other Total Common Equity	(1,230.4) 9,103.6	9,977.7	(1,485.6) 9,820.1	(1,203.8) 11,758.4	(1,038.5) 11,957.9	(1,038.5) 12,729.1	(1,038.5) 13,401.1	(1,038.5) 14,153.0	(1,038.5) 14,974.7	(1,038.5) 15,791.3
rotal collinon Equity	2,103.0	2,311.1	7,020.1	11,730.4	11,557.5	16,767.1	13,701.1	14,133.0	14,774.7	13,771.3
Minority Interest	1,507.5	1,073.5	1,008.1	1,143.5	1,269.3	1,471.4	1,647.5	1,844.5	2,059.8	2,273.8
-	-	-	-	-	-					,
Total Equity	10,611.1	11,051.1	10,828.2	12,902.0	13,227.2	14,200.4	15,048.6	15,997.5	17,034.5	18,065.1
Total Linkillitian And Francisco	22 255 4	25 502 5	24.025.2	26 242 2	22.024.7	22.040.0	24 224 0	25 102 5	26 272 6	275422
Total Liabilities And Equity	23,355.1	25,503.5	24,025.2	26,242.3	32,934.7	33,848.8	34,324.8	35,193.5	36,372.6	37,542.3

in	mil	lions	o	f EUR

Cash Flow Statement	12 months	12 months	12 months	12 months	12 months	12 months				
	Dec-26-2015	Dec-31-2016	Dec-30-2017	Dec-29-2018	Dec-28-2019	Dec-2020E	Dec-2021E	Dec-2022E	Dec-2023E	Dec-20241
Net Income	954.9	1,144.0	1,279.8	1,981.9	1,199.6	1,014.6	884.2	989.4	1,081.2	1,074.4
Depreciation & Amort.	547.1	594.0	622.7	631.4	1,417.9	1,514.6	1,614.9	1,718.8	1,826.4	1,937.5
Amort. of Goodwill and Intangibles	101.1	107.5	112.8	73.1	1,417.9	1,514.6	131.2	1,718.8	1,826.4	1,937.5
Depreciation & Amort., Total	648.2	701.5	735.5	704.5	1,524.7	1,660.2	1,746.1	1,862.9	1,969.1	2,086.0
Depreciation & Amort, 1 otal	048.2	701.5	/33.5	704.5	1,524.7	1,000.2	1,/46.1	1,862.9	1,969.1	2,086.0
Other Amortization				20.4	28.7					-
Gain) Loss From Sale Of Assets	(4.8)	(5.4)	(57.7)	(805.3)	(99.1)	-	-	-	-	-
Gain) Loss On Sale Of Invest.	-	-	(36.4)	(1.8)	0.1	-	-	-	-	-
Asset Writedown & Restructuring Cost		-	-	64.7	39.8	-	-	-	-	-
Income) Loss on Equity Invest.	(16.0)	(52.9)	(57.0)	(28.4)	(27.7)	-	-	-	-	
ctock-Based Compensation	8.4	27.4	46.8	10.7	2.0	-	-	-	-	-
Other Operating Activities	219.0	276.3	436.5	634.0	719.8	-	-	-	-	
Change in Acc. Receivable	(260.9)	(318.7)	(99.1)	(170.5)	(64.1)	(101.2)	(100.5)	(98.8)	(94.4)	(92.4)
Change In Inventories	(271.3)	(60.2)	(62.7)	(157.1)	(117.5)	(47.0)	(46.7)	(45.9)	(43.8)	(42.9)
Change in Acc. Payable	832.7	467.8	111.9	(80.1)	(164.8)	78.7	22.8	22.4	21.4	20.9
Change in Inc. Taxes	(8.2)	14.5	(30.3)	156.6	(7.7)	(101.8)	-	-	-	
Change in Other Net Operating Assets	(335.4)	(262.3)	(75.5)	(267.7)	(466.9)	378.7	89.8	88.3	84.3	82.5
Cash from Ops.	1,766.6	1,932.0	2,191.8	2,061.9	2,567.0	2,882.1	2,595.7	2,818.2	3,017.7	3,128.6
apital Expenditure	(858.9)	(930.5)	(944.5)	(1,057.3)	(1,124.8)	(1,168.2)	(1,212.1)	(1,256.2)	(1,299.6)	(1,343.1)
	15.7	16.0	103.2	54.5	11.5		-	-		
ash Acquisitions	(90.3)	(379.9)	(521.3)	(250.0)	(2,160.1)	(539.1)	(553.8)	(568.3)	(582.1)	(595.7)
Divestitures	38.8	1.3	157.0	1,532.7	43.3					
Sale (Purchase) of Intangible assets	(29.3)	(12.2)	(26.4)	(85.1)	(38.0)	(185.9)	(171.2)	(183.4)	(180.3)	(185.3)
nvest. in Marketable & Equity Securt.	(165.9)	(12.8)	238.1	(440.0)	(18.0)		-	-	-	-
Net (Inc.) Dec. in Loans Originated/Sold	, ,	72.0	2.2	0.1	-					
Other Investing Activities										
Cash from Investing	(901.9)	(1,246.1)	(991.5)	(245.0)	(3,286.0)	(1,893.2)	(1,937.1)	(2,007.9)	(2,062.0)	(2,124.0)
Short Term Debt Issued	312.1	929.5	566.1	868.3	1,018.6	752.6	229.1			
ong-Term Debt Issued	5.4	114.1	739.9	612.4	3,842.2	444.5	876.6	2,527.5	646.9	354.3
otal Debt Issued	317.6	1.043.6	1,306.0	1,480.7	4,860.8	1,197.1	1,105.7	2,527.5	646.9	354.3
Short Term Debt Repaid	(322.8)	(481.3)	(357.4)	(243.5)	(1,256.1)	(1,209.9)	(752.6)	(229.1)	-	
ong-Term Debt Repaid	(554.8)	(662.8)	(1,099.3)	(1,375.1)	(2,904.7)	(444.5)	(876.6)	(2,527.5)	(646.9)	(354.3)
otal Debt Repaid	(877.6)	(1,144.1)	(1,456.7)	(1,618.7)	(4,160.9)	(1,654.4)	(1,629.2)	(2,756.6)	(646.9)	(354.3)
our pest repair	(077.0)	(1,1111)	(1,100.7)	(1,010.7)	(1,100.5)	(1,051.1)	(1,027.2)	(2,750.0)	(010.5)	(551.5)
ssuance of Common Stock	85.0	47.5	47.6	47.4	15.9		-	-	-	
Repurchase of Common Stock			(57.9)	(37.2)	(599.8)	-	-	-	-	-
Common Dividends Paid	(236.8)	(244.3)	(294.0)	(324.8)	(354.6)	(243.5)	(212.2)	(237.5)	(259.5)	(257.9)
otal Dividends Paid	(236.8)	(244.3)	(294.0)	(324.8)	(354.6)	(243.5)	(212.2)	(237.5)	(259.5)	(257.9)
	(	()	(,	()	()	()	(,	(	(	(
Special Dividend Paid	-	-	-	-	-	-	-	-	-	
Other Financing Activities	(195.7)	(222.4)	(343.5)	(229.1)	(228.0)	202.1	176.1	197.0	215.3	214.0
Cash from Financing	(907.5)	(519.7)	(798.6)	(681.7)	(466.6)	(498.7)	(559.7)	(269.5)	(44.2)	(43.9)
Foreign Exchange Rate Adj.	25.4	38.0	(132.4)	32.4	47.8					
Net Change in Cash	(17.3)	204.2	269.2	1,167.5	(1,137.9)	490.2	98.9	540.9	911.6	960.7

Segment Information	12 months Dec-26-2015	12 months Dec-31-2016	12 month Dec-30-20		12 months Dec-29-2018	12 mont Dec-28-2		12 months Dec-2020E	12 months Dec-2021E	12 months Dec-2022E	12 months Dec-2023E	12 months Dec-2024E
Total Revenue from Products and Services	16,760.0	17,034.0	17,781.1		16,544.0	17,471.6		17,970.8	18,461.4	18,943.7	19,404.3	19,855.2
Health Care Services	13,232.0	13,506.0	14,532.0		13,264.0	13,872.0		14,244	14,615	14,984	15,351	15,716
North America Prevalence count (ESRD)	11,016.0 694,312	11,214.0 715,321	12,036.0 733,984		10,725.0 778,576	11,157.0 796,128		11,391 812,846.7	11,631 829,916.5	11,875 847,344.7	12,124 865,139.0	12,379 883,306.9
Growth (%)	071,012	3.09		2.6%			2.3%					
% of prevalent cases	26.3%	26.4%	26.9%		26.2%	26.5%		26.5%				
Average treatments per patient	151.42	152.83	151.02		151.12	152.27		152.27	152.27	152.27	152.27	152.27
Average revenue per treatment	397.88	388.27	403.84		347.72	347.15		347.15	347.15	347.15	347.15	347.15
Other	2,216	2,292	2,496		2,539	2,715		2,853	2,985	3,109	3,227	3,338
Number of patients treated	111,529.0	119,484.2	123,604.1	L	129,224.1	134,032	.1	140,365	146,379	152,062	157,407	162,415
y-o-y growth (%)		7.139	6 3	3.45%	4.559	6	3.72%	4.73%	4.28%	3.88%	3.52%	3.18%
Europe, Middle East and Africa (EMEA)	54,857.0	59,767.0	62,490.0		65,061.0	66,217.0		68,865.7	71,344.8	73,656.4	75,804.2	77,793.6
y-o-y growth (%)		8.959	6	4.56%	4.119	6	1.78%	4.0%	3.6%	3.2%	2.9%	2.6%
Asia-Pacific	26,472.0	29,328.0	29,739.0		31,476.0	33,005.0		35,645.4	38,211.9	40,688.0	43,060.9	45,321.1
y-o-y growth (%)		10.799	6 :	1.40%	5.849	6	4.86%	8.0%	7.2%	6.5%	5.8%	5.2%
Latin America	30,200.0	30,389.0	31,375.0		32,687.0	34,810.0		35,854.3	36,822.4	37,717.1	38,542.0	39,300.6
y-o-y growth (%)		0.639	6 3	3.24%	4.189	6	6.49%	3.0%	2.7%	2.4%	2.2%	2.0%

FY2015 FY2016 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022

PPE Gross Value for FY2019		Useful Life	% of Capex
Land	63.99	NA	0.7%
Buildings and Improvements	3,644.44	14	38.9%
Machinery and Equipment	5,139.66	10	54.9%
Construction in Progress	509.28	NA	5.4%
Total	9,357.367		100%

	FY2015		FY2016		FY2017		FY2018		FY2019		FY2020	FY2021		FY2022		FY2023		FY2024	
Capital Expenditure	(859)		(931)		(945)		(1,057)		(1,125)		(1,168)	(1,212)		(1,256)		(1,300)		(1,343)	
% of Revenue		5.6%		5.6%		5.3%		6.4%		6.4%	6.59	6	6.6%		6.6%		6.7%		6.8%
Gross PPE									14,413		15,582	16,794		18,050		19,349		20,692	
Depreciation of Existing PP&E									1,418		1,418	1,418		1,418		1,418		1,418	
Depreciation of New PP&E											97	197		301		408		520	
Total Projected Depreciation											1,515	1,615		1,719		1,826		1,937	

	Capex	FY2020	FY2021	FY2	2022	FY2023	FY2024	
FY2020	455.0	32.5	3	2.5	32.5	32.5		32.5
FY2021	472.1		3	3.7	33.7	33.7		33.7
FY2022	489.2				34.9	34.9		34.9
FY2023	506.2					36.2		36.2
FY2024	523.1							37.4
		32.5	6	6.2	101.2	137.3	1	74.7

FY2023 FY2024

Depreciation	n of new Machinery	and Equipn	ent				Useful Life	10.0	
	Capex	FY2020	FY2021		FY2022		FY2023	FY2024	
FY2020	641.	6 6	4.2	64.2		64.2	64.2		64.2
FY2021	665.	7		66.6		66.6	66.6		66.6
FY2022	690.	0				69.0	69.0		69.0
FY2023	713.	В					71.4		71.4
FY2024	737.	7							73.8
		6	4.2	130.7		199.7	271.1		344.9

Intangibles											FY202	20	FY202	1	FY202	2	FY202	3	FY202	4
Total Intangibles excl. Goodwill	764.7		803.1		683.1		681.3		1,426.3		1,467		1,507		1,546		1,584		1,620	
% of revenue		4.9%		4.8%		3.8%		4.1%		8.2%		8.2%		8.2%		8.2%		8.2%		8.2%
Amortisable Intangibles	614.1		601.1		505.3		495.3		1,195.9		1,230		1,263		1,296		1,328		1,359	
% of Total Intangibles excl. Goodwill		80%		75%		74%		73%		84%		83.8%		83.8%		83.8%		83.8%		83.8%
Amortisation	101.1		107.5		112.8		73.1		106.8		146		131		144		143		148	
% of Amortisable Base		16%		18%		22%		15%		9%		11.8%		10.4%		11.1%		10.7%		10.9%
Additions											186		171		183		180		185	
Other											FY202	0:0	FY202	1	FY202	2	FY202	3	FY202	4
Accounts Receivable	3,326.5		3,700.5		3,501.0		3,430.4		3,580.5		3,681	8	3,782.	3	3,881.	1	3,975.	5	4,067.9	9
% of revenue	5,520.0	21.5%	5,7 00.5	22.3%	5,502.0	19.7%		20.7%	5,500.5	20.5%	5,001	20.5%	5,7 02.	20.5%	5,001.	20.5%	5,575.	20.5%	1,007.	20.5%
Other Receivables	500.6	22.070	438.7	22.0 /4	195.2	2317 70	335.2	2011 /4	388.7	2010 /9	399.7	2010/0	410.6	2010/0	421.4	20.070	431.6	20.070	441.6	20.070
% of revenue	500.0	3.2%	100.7	2.6%		1.1%		2.0%	500.7	2.2%		2.2%	110.0	2.2%		2.2%	151.0	2.2%	11110	2.2%
Inventory	1.234.5		1.337.5		1.290.8	2.2 /0	1.466.8		1.663.3		1,710		1,757.		1,802.		1.846.		1,889.7	
% of revenue	-,20 110	8.0%	-,	8.1%	2,27010	7.3%	-,	8.9%	2,20010	9.5%		9.5%	-,	9.5%	2,302.	9.5%		9.5%	2,0071	9.5%
Prepaid Exp.	67.7	0.070	71.0	0.2 70	72.9	7 70	81.0	0.570	46.2	2.0 70	51.0	3,000	52.4	21.070	53.7	3,000	55.0	3.070	56.3	3,070
% of Operating Exp.	07.7	2.2%	. 1.0	2.2%	. 415	1.9%	31.0	2.7%	.0.2	1.5%	31.0	1.5%	32.1	1.5%	30.7	1.5%	35.0	1.5%	50.5	1.5%
Other Current Assets	332.4	2.270	361.5	2.270	320.9	1.770	268.4	2.7 70	323.2	2.3 70	332.3	1.070	341.4	1.570	350.3	1.570	358.8	1.070	367.1	1.570
% of revenue	hace	2.2%		2.2%	320.5	1.8%		1.6%	323.2	1.8%		1.8%	341.4	1.8%	330.3	1.8%	330.0	1.8%	307.1	1.8%
Other Long-Term Assets	436.9	2.270	376.7	2.270	319.6	1.070	552.3	1.0 70	620.4	1.0 70	638.0	1.070	655.4	1.070	672.5	1.070	688.9	1.070	704.9	1.070
% of revenue	430.9	2.8%	3/0./	2.3%	319.0	1.8%	332.3	3.3%	020.4	3.6%	030.0	3.6%	033.4	3.6%	0/2.3	3.6%	000.9	3.6%	704.9	3.6%
Accounts Payable	719.0	2.070	839.6	2.370	631.0	1.070	702.9	3.370	756.2	3.070	834.9	3.0%	857.7	3.0%	880.1	3.070	901.5	3.090	922.4	3.090
% of Operating Exp.	/19.0	23.8%	039.0	25.6%	031.0	16.8%		23.7%	730.2	23.8%		23.8%	037.7	23.8%	000.1	23.8%		23.8%	922.4	23.8%
Accrued Exp.	1,246.6		1,235.0		1,475.1	10.070	1,436.9		1,104.4		1.219		1,252.		1,285.		1,316.		1,347.1	
% of Operating Exp.	1,240.0	41.2%	1,235.0	37.7%	1,4/5.1	39.3%	1,430.3	48.4%	1,104.4	34.8%	1,219	.s 34.8%	1,252.	34.8%	1,205.	34.8%	1,310.	34.8%	1,347.	34.8%
Other Current Liabilities	1,056.6		1,801.7	37.770	1,414.3	39.370	1,489.5		1.726.2		1.905		1,957.		2,009.		2,057.5		2.105.7	
	1,050.0		1,001./	E4 006	1,414.3	37.7%			1,720.2	54.3%			1,937.		2,009.		2,037.		2,105.	
% of Operating Exp. Pension & Other Post-Retire. Benefits	538.9	35.0%	512.5	54.9%	530.6	3/./70	551.9	50.1%	689.2	34.370	760.9	54.3%	781.7	54.3%	802.1	54.3%	821.6	54.3%	840.7	54.3%
	530.9	17.8%	512.5	15.6%	530.6	14.1%		18.6%	009.2	21.7%	760.9	21.7%	/01./	21.7%	002.1	21.7%	021.0	21.7%	040./	21.7%
% of Operating Exp. Other Non-Current Liabilities	577.5	17.8%	1,144.8	15.6%	1,103.1	14.170	848.1	18.6%	746.8	21./70	824.5	21.790	847.0	21.790	869.1	21.790	890.2	21.790	910.9	21.790
% of Operating Exp.	5//.5	19.1%		34.9%	1,103.1	29.4%		28.5%	746.8	23.5%		23.5%	847.0	23.5%	869.1	23.5%	890.2	23.5%	910.9	23.5%
Dividends	FY2015	5	FY2016		FY2017		FY2018	3	FY2019	)	FY202	0	FY202	1	FY202	2	FY202	3	FY202	4
Dividends Paid	(237)		(244)		(294)		(325)		(355)		(243.	5)	(212.2	0	(237.5	)	(259.5	)	(257.9	)
Payout Ratio (%)	(,	24.8%	(,	21.4%	()	23.0%	()	16.4%	()	29.6%		24.0%		24.0%		24.0%		24.0%		24.0%
Debt Schedule																				
											,									
in EUR millions		ace		Rate		urity		CY		3V	╛									
Revolving Credit		3.46	3.2			22		SD	123											
Term Loan		94.89	3.2			22		SD	1,09											
Term Loan		7.00	0.9			22		UR	287											
Term Loan		0.00	0.9			22		UR	400											
Bond		0.00	5.6			19		UR		00										
Bond		0.00	5.2			19		UR		00										
Bond		0.00	4.1			20		UR		.507										
Bond		0.00	5.7			21		UR		.069										
Bond		0.00	5.2			21		UR		.498										
Bond		0.00	5.8			22		UR		.135										
Bond		0.00	0.2			23		UR		.936										
Bond		0.00	4.7			24		UR		.338										
Bond		0.00	1.5			25		UR		.138										
Bond		0.00	0.6	3%		26	E	UR	593	.216										
Bond	500	0.00	3.7	5%	20	29	E	UR	435	.673										
Bond	500	0.00	1.2	5%	20	29	Е	UR	497	.109										
Total LT Debt		255.36																		
Weighted Cost of Debt	о,	3.34%																		
weighted Cost of Debt		3.3470	,																	

Company Name	Levered Beta	Tax Rate	Debt to Equity	Unlevered Beta		Country	Revenue	Contribution	Tax Rate	Equity Risk Premium
DaVita Inc. (NYSE:DVA)	1.18	21.0%	3.19	0.33	North America		11,810	70.6%	21.0%	5.239
American Renal Associates Holdings, Inc. (NYSE:ARA) Fresenius SE & Co. KGaA (XTRA:FRE)	1.51 1.15	21.0% 15.0%	3.48 0.51	0.40 0.80		e East and Africa (EMEA)	2,369	14.2%	22.5%	7.079
Medtronic plc (NYSE:MDT)	0.68	21.0%	0.50	0.49	Asia-Pacific		1,353	8.1%	16.5%	6.269
Abbott Laboratories (NYSE:ABT) Terveystalo Oyj (HLSE:TTALO)	0.91 1.19	21.0% 20.0%	0.61 1.09	0.61 0.64	Latin America Total		1,202 16,734	7.2%	32.0%	9.64%
Median	1.17	20.070	1.07	0.55					21.6%	5.89%
WACON III										
WACC Buildup Risk Free Rate			0.339	26						
Levered Beta			0.55	-						
Market Risk Premium			5.99							
Harnet Hight Fellifall			5.7	70						
Cost of Equity			6.139							
Proportion of Equity			61.09	% Beta	l					
Cost of Debt			3.349	% Deb	Ratio				39.0	10%
Proportion of Debt			39.09	1/2	Ratio					
Tax Rate			15.09	% D/E					78.4	
				Beta						89
WACC			4.859	% Adju	sted Beta				0.	98
DCF Valuation (Terminal Gro	wth)									
Enterprise Value			37,6	99						
Less: Debt			(9,1	.15)						
Less: Lease Liabilities			(4,7	(05)						
Add: Cash and Cash Equivalents	;		1,	163 Ter	minal Growt	1				
Add: Minority Interest			1,	269			Growth Rate	Contributio	on	
•				Nort	h America		1.89	<b>%</b> 71%		
Market Value			26,3			ist and Africa (EMEA)		<b>%</b> 14%		
Current Price			65	Asia	-Pacific			<b>8%</b>		
			306	Laui	n America		2.29	<b>%</b> 7%		
Outstanding Shares (mln)					ahtad Darna	ual Growth Rate	1.81	0/4		
Share Price (EUR)			85.	/4 Wei	giiteu r ei pe	uai Gi owtii Kate	1.01	70		
						WACC				
			.85%		.35%	4.85%	5.35%		5%	_
	6%		29.51		9.70	79.08	63.97		.43	
	7%	_	36.59		04.31	82.30	66.34		.24	
	8%	_	44.36	10	09.28	85.74	68.85	56	.14	
1.	9%	1	52.93	1:	14.66	89.41	71.50	58	.13	
2.	0%	1 1	62.43	13	20.50	93.34	74.31	60	.23	

Company	LTM EV/Revenue	NTM EV/FWD EBIT	NTM EV/FWD Revenue
DaVita Inc. (NYSE:DVA)	1.8x	13.1x	2.0x
American Renal Associates Holdings, Inc. (NYSE:ARA)	1.6x	17.7x	1.5x
Terveystalo Oyj (HLSE:TTALO)	1.8x	17.4x	1.7x
Novartis AG (SWX:NOVN)	4.1x	13.5x	4.3x
Medtronic plc (NYSE:MDT)	5.5x	19.7x	5.0x
Abbott Laboratories (NYSE:ABT)	6.7x	21.9x	5.6x
High	6.70x	21.93x	5.61x
75th Percentile	5.80x	20.29x	5.18x
Median	2.95x	17.54x	3.12x
25th Percentile	1.75x	13.39x	1.69x
Low	1.60x	13.12x	1.53x