Competition Commission
SINGAPORE

**Section 57 of the Competition Act (Cap. 50B)**

**Grounds of Decision issued by the Commission**

**Notification for Decision: Proposed Acquisition by Fresenius Medical Care Beteiligungsgesellschaft mbH and Fresenius Medical Care AG & Co. KGaA of Asia Renal Care, Limited**

**14 July 2010**

**Case number: CCS 400/005/10**

Confidential information in the original version of this Decision has been redacted from the published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [✂].

## I. INTRODUCTION

1. On 17 May 2010, the Competition Commission of Singapore ("CCS") received a Notification for Decision pertaining to an anticipated transaction (the "Transaction"), whereby Fresenius Medical Care Beteiligungsgesellschaft mbH ("FMC BmbH") and Fresenius Medical Care AG & Co. KGaA ("FMC KGaA" also known as "Purchaser's Guarantor") (collectively the "Purchasers") will acquire 100% of the shares of Asia Renal Care, Limited ("ARC Limited" or the "Target") from Bumrungrad International Holdings (Hong Kong) Ltd ("BIHL"); and Bumrungrad International Limited ("BIL" also known as the "Seller's Guarantor") (collectively the "Sellers").[1] FMC BmbH and FMC KGaA, are collectively referred to as "the Applicants". The Transaction has yet to be completed.[2]

2. CCS has concluded that the Transaction, if carried into effect, will not infringe section 54 of the Competition Act ("the Act").

[1] Paragraph 1.1 of Part 1 of Form M1 submitted on 17 May 2010 ("Form M1").
[2] Paragraph 1.2 of Part 2 of Form M1.

## II. THE PARTIES

### (a) FMC BmbH and FMC KGaA

3. FMC BmbH is a company registered in Germany. FMC BmbH does not carry on any business. FMC KGaA is a company registered in Germany. FMC KGaA is a listed company on Frankfurt Stock Exchange (DAX) & New York Stock Exchange and is the Holding company of the FMC Group major subsidiaries on a worldwide basis, including FMC BmbH, the Purchaser, and FMC Singapore Pte Ltd. FMC KGaA is an integrated provider of products and services for individuals undergoing dialysis treatments because of chronic kidney failure. Through its network of dialysis clinics, FMC KGaA provides dialysis treatments to patients in North America, Europe, Latin America, Asia-Pacific and Africa. FMC KGaA is also a worldwide provider of dialysis products such as haemodialysis machines, dialyzers and related disposable products. 89% of FMC KGaA's revenue is generated in North America and Europe.

4. In Singapore, FMC KGaA is present through its subsidiary FMC Singapore Pte Ltd which, directly or indirectly through its 100% subsidiary NephroCare GDI Pte Ltd, owns / manages three (3) dialysis centres out of the 58 dialysis centres established in Singapore. In addition, FMC Singapore Pte Ltd acts as an outsourced provider for one (1) centre owned by the Kidney Dialysis Foundation, [✂]. FMC Singapore Pte Ltd is also responsible for the sale of dialysis products in Singapore.[3]

### (b) BIL and BIHL

5. BIL is a company registered in Thailand and is the sole shareholder of BIHL, a holding company which has no commercial activities. BIHL is a company registered in Hong Kong and owns 100% of the shares in ARC Limited. BIL focuses on ownership, acquisition and management of hospitals and healthcare delivery companies in the Middle East and Asia. It owns, operates and manages hospitals and healthcare facilities in seven countries in Asia and the Middle East, (including Asian Hospital in Manila, Philippines; Mafraq Hospital in Abu Dhabi, UAE), and the Asia Renal Care Group.

6. ARC Limited's Group is a leading provider of dialysis and related services in Asia. ARC Limited was founded in 1996 and headquartered in Singapore since 2002. As at 31 December 2009, it owned and/or operated about eighty-eight (88) dialysis facilities across Asia, treating more than five thousand and six hundred (5,600) patients. ARC Limited has operations in Taiwan, Korea, Philippines, Malaysia, Thailand and Singapore and it provides management services in Japan.

7. In Singapore, either directly or through its wholly owned subsidiary, Asia Renal Care (SEA) Pte Ltd, ARC Limited provides dialysis and related services

[3] Paragraph 2.2 of Part 2A of Form M1.

through a network of [✂] dialysis centres in 2008 and [✂] dialysis centres in 2009 out of the 58 dialysis centres established in Singapore.[4]

## III. THE TRANSACTION

8. The Transaction will result in the acquisition by FMC BmbH and FMC KGaA of sole control over ARC Limited, by way of a cash purchase of 100% of the shares of ARC Limited. The Transaction is subject to fulfilling the conditions in the Share Purchase Agreement ("SPA") and ARC Thailand SPA, including obtaining the necessary approvals by the competition authorities in Singapore and Taiwan.

9. On the basis of the information furnished by the Applicants, CCS is of the view that the Transaction constitutes an anticipated merger pursuant to section 54(2)(b) of the Act, and has proceeded to assess the competitive effects of the Transaction.[5]

## IV. POTENTIAL COMPETITION ISSUES

10. The Applicants have submitted that the only market in which the activities of the Purchasers and the Target overlap is in the market for the provision of Haemodialysis ("HD") services.

11. The Applicants have also submitted that the Purchasers are active in the upstream market(s) of dialysis products.[6] FMC KGaA supplies HD machines and dialyzers, bloodlines and needles and HD concentrates (collectively "HD products") as well as some Peritoneal Dialysis ("PD") products for PD treatment. FMC KGaA also provides spare parts in relation to these products. The Target, however, does not supply dialysis products in Singapore.[7]

12. CCS notes that the Purchasers are primarily active in the sale of HD machines and HD products whereas the Target is primarily active in the provision of kidney dialysis services. There is an overlap horizontally in the market for the provision of HD treatment and the provision of dialysis services, but no overlap in the vertical relationship of supply of kidney dialysis products.

13. CCS has received responses from third parties ("Respondents") during the public consultation on the Transaction that post-merger, the kidney dialysis industry would be dominated by the merged entity, and the merged entity would likely replace their competitors' HD machines and HD products in dialysis centres run by the Target with their own HD machines and HD products.

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[4] Paragraph 2.2 of Part 2A of Form M1.

[5] Section 54(2)(b) of the Act states that a merger occurs if one or more persons or other undertakings acquire direct or indirect control of the whole or part of one or more other undertakings.

[6] Paragraph 3.2(B)(2) of Form M1.

[7] Paragraph 3.2(B)(5) of Form M1.

14. Therefore, CCS has examined whether the Transaction potentially leads to substantially lessening of competition due to (a) the horizontal merger in the market of kidney dialysis services, and (b) vertical integration below.

## V. RELEVANT MARKETS

### *(a) Product market*

***Description of dialysis treatment***

15. The Applicants state that patients with End-Stage Renal Disease ("ESRD") require renal replacement therapy, in the form of kidney dialysis or kidney transplantation, for their survival. HD and PD are the two main forms of dialysis used to treat patients with ESRD.[8]

16. In the HD process, the blood is filtered through a machine together with a dialyzer that acts like an artificial kidney and returned back into the body. HD needs to be performed in a designated dialysis centre. This is carried out about 3 times per week, with each episode taking about 3 to 4 hours.

17. In the case of PD, the blood is cleaned without being removed from the body. There are 2 types of PD, namely continuous ambulatory peritoneal dialysis ("CAPD") and automated peritoneal dialysis ("APD"). CAPD needs to be done 3 to 5 times every day, but does not require a machine. In contrast, APD uses an automated cycler machine to perform 3 to 5 exchanges during the night while the patient is asleep. Close medical supervision is not usually required for most PD cases, thus making it a feasible option for patients who may want to undergo dialysis in the home setting.

***Applicants' submission***

18. The Applicants state that both PD and HD have the same purpose and most of ESRD patients typically have the option to choose between PD and HD treatment.

19. The Applicants referred to the article "Treatment options for ESRD – Haemodialysis ('HD'), peritoneal dialysis ('PD') and kidney-transplantation ('TX') – Should one treatment method substitute the other?" by the medical director of FMC Asia-Pacific Ltd Dr.med Michael Etter who noted that HD and PD have shown to produce similar outcomes and survival rates[9]. In addition, the Applicants also highlighted the decision of the US Federal Trade Commission ("FTC") in 2005 involving a complaint that was raised in *the acquisition of Gambro Healthcare Inc. by DaVita Inc* in 2005 as substantially lessening competition in the market for "outpatient

[8] Paragraph 6.1A of Form M1.
[9] Appendix 13 in Form M1.

dialysis services"[10]. In this instance, the FTC defined dialysis as "filtering a person's blood, inside or outside the body, to replicate the functions of the kidney". In other words, as the Applicants put it, the FTC did not make a distinction between PD and HD treatments as the relevant market of outpatient dialysis services was described as "all procedures and services related to administering chronic dialysis treatment".

20. An alternative to PD or HD treatments for ESRD patients would be kidney transplant[11]. However, the Applicants submit that kidney transplant is not a substitute to PD or HD treatments. According to the Applicants the average waiting time for non-living donor renal transplant is 7 years in Singapore, and not all patients are eligible for transplant or find a donor match because of their medical conditions and age. The Applicants also referred to the aforementioned case of *acquisition of Gambro Healthcare Inc. by DaVita Inc* in 2005[12]:

> "The only alternative to outpatient dialysis treatments for patients suffering from ESRD is a kidney transplant. However, the wait-time for donor kidneys – during which ESRD patients must receive dialysis treatments – can exceed five years. Additionally, many ESRD patients are not viable transplant candidates. As a result, many ESRD patients have no alternative to ongoing dialysis treatments".

21. In view of the above, the Applicants have submitted that HD and PD services are substitutes and the product market is dialysis services including both HD and PD services. The Applicants also submit that the provision of HD and PD services to subsidised patients at lower costs depending on their means, does not change the market definition.[13]

***CCS' assessment***

22. CCS notes that there is a long waiting time for kidney transplant in Singapore. As of end 2008, there were 511 ESRD patients waiting for a deceased donor kidney transplant in Singapore and the median waiting time for patients undergoing deceased donor kidney transplant in Singapore was 9.44 years. In 2006, the overall deceased donor and living donor rate for kidney transplants performed locally for Singaporeans and permanent residents of Singapore was 22.6 per million population (pmp), which falls short of the demand.[14]

23. With respect to the Government subsidies for HD and PD treatments, CCS notes that the same subsidy quantum ($200 per month to $300 per month) will be given for both HD and PD treatment at Voluntary Welfare Organisations ("VWO").[15]

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[10] FTC Case 0510051, annexed as Appendix 14 in Form M1.
[11] Paragraph 6.1A of Form M1.
[12] Paragraph 9, FTC Case 0510051.
[13] Paragraph 6.1A of Form M1.
[14] April 2009, Vol. 38 No. 4 of Annals of the Academy of Medicine Singapore on Renal Transplantation in Singapore by Dr. Vathsala A and Dr. Chow Khuan Yew
[15] Paragraph 6.1A of Form M1.

24. CCS has received feedback from Respondents that HD and PD treatments are substitutes although they may not be easily interchangeable due to either medical reasons (the treatment is advised by the physician) or the patients' personal preference (reluctance to make switch as they had become accustomed to the method of treatment).

25. Some Respondents state that it is feasible to substitute between CAPD and APD, and it is the patients' choice as APD treatment may be more costly. A Respondent also said that a patient may switch to CAPD as the patient concerned is unable to sleep at night with the noise generated from the APD machines or may have clinical reasons for not doing well on APD.

26. In view of the above, CCS notes that while it is arguable that HD and PD treatments may be substitutes for each other and that the relevant product market is kidney dialysis services, CCS has, in any event, proceeded to consider the effect of the merger on both the (i) HD treatment and (ii) HD and PD treatment markets for kidney dialysis services separately. In addition, CCS will also consider the market in which the merger parties provide dialysis services for patients, management services for dialysis centres and sale of products to dialysis centres and patients (in Parts VI and VII of Grounds of Decision). CCS is also of the view that it is not necessary to further differentiate between CAPD and APD as the nature of such PD services is the same notwithstanding the differences in the administration of the PD treatment or costs of treatment.

## (b) Geographic Market

### *Applicants' submission*

27. The Applicants submitted that the geographic scope of dialysis services is national.[16] With regards to HD services in particular, HD treatment must be conducted 3 times a week, which means that HD patients need to go to a dialysis centre located at a reasonable distance from their residence. The Applicants referred to the decision of the FTC in the *acquisition of Gambro Healthcare Inc. by DaVita Inc in 2005* which identified 30 miles or 30 minutes travel, suggesting that the market is narrower than national. Given the geographic size of Singapore, it is, however, unlikely that the market will be narrower than national in scope.

### *CCS' assessment*

28. CCS received feedback from Respondents that although HD treatment is cheaper in Malaysia, it is not practical for kidney dialysis patients to travel there 3 times per week, each session lasting 3-4 hours for treatment. Another possible deterrent in seeking treatment outside Singapore is that these patients are unable to utilise funds from their Medisave (a national medical savings scheme) accounts and

[16] Paragraph 6.1A of the Form M1.

Medishield (low cost catastrophic illness insurance scheme initiated by Government) to cover or defray the costs of the overseas kidney dialysis treatment. CCS agrees with the Applicants' submission that the geographic market is the entire market in Singapore.

## VI. MARKET STRUCTURE

### *Applicants' submission*

29. The Applicants have submitted that data collected by FMC KGaA in relation to ESRD patients in Singapore for year 2009, show that pre-merger, the two largest providers of HD services in Singapore NKF [60-70]% and the Target [20-30]% together had more than 70% market share, and the Target already had more than 20% market share, which means that pre-merger the thresholds set out by CCS were already crossed.[17]

30. FMC KGaA (through FMC Singapore Pte Ltd) has a market share of [0-10]%, and the merged entity will see a minimal increase in its overall market share. It does not change the structure of the market, i.e. the merged entity remains the second largest provider of HD services in Singapore.

31. The Applicants cited CCS' decision concerning the merger between *National Oilwell Varco Pte Ltd and South Seas Inspection (S) Pte Ltd*, where the merger resulted in the merged entity having between 75% and 85% market share, which the Applicants claim is a higher market share than in the present Transaction. The Applicants said CCS found that the increase in market concentration arising from that merger was incremental and that merger would not lead to a significant change in the existing structure of the relevant market. This, linked to the fact that customers were able to easily switch from one service provider to another, led CCS to conclude that the merger would not lead to an increase in coordinated effects.[18]

### *CCS' assessment*

32. In this case, most of the Respondents submitted to CCS that the number of patients provide a good measure of market share. CCS notes that the patient numbers are more readily available and prices per dialysis session vary significantly for the private dialysis centres, restructured hospitals and VWOs. Based on patient numbers provided by the Applicants, CCS found that the merged entity will have a market share of between 20% to 40% and the post-merger combined market share of the three

[17] Paragraph 5.15 of the CCS Guidelines on Substantive Assessment of Mergers state that CCS is generally of the view that competition concerns are unlikely to arise in a merger situation unless:
(i) the merged entity will have a market share of 40% or more; or
(ii) the merged entity will have a market share of between 20% to 40% and the post-merger combined market share of the three largest firms (also known as "CR3") is 70% or more.
[18] Paragraph 3.2B(2) of Form M1.

largest firms is 70% or more. This is illustrated in the table below:

| Patient Numbers (2009) | HD | PD | HD + PD |
|---|---|---|---|
| NKF (VWO) | [✂] | [✂] | [✂] |
| KDF (VWO) | [✂] | [✂] | [✂] |
| PDC (VWO) | [✂] | - | [✂] |
| ARC | [✂] | - | [✂] |
| FMC | [✂] | - | [✂] |
| ARC + FMC | [✂] | - | [✂] |
| Others* | [✂] | [✂] | [✂] |
| Total** | [✂] | [✂] | [✂] |

| Merged Entity % | HD | PD | HD+PD |
|---|---|---|---|
| Pre-Merger ARC | [20-30]% | 0% | [20-30]% |
| Pre-Merger FMC | [0-10]% | 0% | [0-10]% |
| Post-Merger ARC+FMC | [20-30]% | 0% | [20-30]% |
| | | | |
| **CR3 Pre-Merger** | [80-90]% | - | [80-90]% |
| **CR3 Post-Merger** | [90-100]% | - | [80-90]% |

| Patient Numbers (2009) excluding VWO | HD | PD | HD + PD |
|---|---|---|---|
| ARC | [✂] | - | [✂] |
| FMC | [✂] | - | [✂] |
| ARC + FMC | [✂] | - | [✂] |
| Others* | [✂] | [✂] | [✂] |
| Total** | [✂] | [✂] | [✂] |

| Merged Entity % Excluding VWO | HD | PD | HD+PD |
|---|---|---|---|
| Pre-Merger ARC | [70-80]% | 0% | [50-60]% |
| Pre-Merger FMC | [0-10]% | 0% | [0-10]% |
| Post-Merger ARC+FMC | [70-80]% | 0% | [60-70]% |

*Others include private dialysis centres, restructured hospitals with joint ventures or partnerships with private dialysis centres

**Estimate total figures provided by Applicants.

33. However, the thresholds set out in CCS Guidelines are simply indicators of potential competition concerns. They do not give rise to a presumption that such a merger will lessen competition substantially. Further investigation on the facts of the merger is required to determine whether the merger will substantially lessen competition.[19]

[19] Paragraph 5.16 of CCS Guidelines on Substantive Assessment of Mergers.

34. There are two conceptually distinct means by which a horizontal merger may substantially lessen competition: non-coordinated effects and coordinated effects. In the former case, non-coordinated effects may arise where, as a result of a merger, the merged entity finds it profitable to raise prices (or reduce output or quality) because of the loss of competition between the merged entities. In the latter case, a merger may also lessen competition substantially by increasing the possibility that, post-merger, firms in the same market may coordinate their behaviour to raise prices, or reduce quality or output.

## VII. COMPETITION ASSESSMENT

### *(a) Non-Coordinated Effects*

***Applicants' submission***

35. The Applicants submit that at any point in time, patients can choose to switch to another dialysis services provider, and competition in the dialysis services market is intense and based both on prices and the quality of care. The Applicants submit that the merged entity will not be able to raise prices as patients would, as a consequence turn to HD services provided by VWOs or public hospitals which own the largest numbers of dialysis centres, or even to other private dialysis centres.[20]

36. The Applicants also submit that the entry barriers in the market for provision of kidney dialysis services are relatively low. To the extent that all requirements as spelt out by the Ministry of Health ("MOH") are satisfied, a licence to operate a dialysis centre can be obtained. In this connection, the Applicants state that between 2007 and 2009, recent providers of HD services in Singapore have either started operations or expanded in the market, confirming that the entry barriers are low. To support this, they cited the examples of Advance Renal Therapy and Kidney Therapy Centre Pte Ltd (a 75% subsidiary of Orthe Pte Ltd) which entered the market in 2008 and 2009 respectively, and have increased the number of patients treated. Orthe Pte Ltd and Renal Health Pte Ltd (in which ARC has 30% stake in each) have also sharply increased the number of patients treated in Singapore.

37. The Applicants submit that MOH's Guidelines requires a 1:150 doctor-dialysis patient ratio for dialysis centres in Singapore.[21] This means that for each further 150 additional patients, one additional doctor is required. The Applicants state that in the last 5 years, there has been an increase in both the number of doctors opting for specialisation in nephrology and in the number of nephrologists entering into private practice. This reinforces the fact that barriers to entry in the market are effectively low.[22]

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[20] Paragraph 3.2B(3) of Form M1.
[21] Para 2.1.4 of the MOH's Guidelines For Private Healthcare Institutions Providing Renal Dialysis, submitted by the Applicants on 26 May 2010 in response to CCS' request dated 25 May 2010.
[22] Para 3.2(B)(2) of Form M1.

***CCS' assessment***

38. Looking at the market shares of the merger parties for HD treatment, CCS notes that the VWOs provide HD dialysis treatment for about [60-70]% of the patients. The market share for the merger parties is smaller at [20-30]% of the patients. However, as VWOs are focused on providing patient care for needy patients and they are operating at close to full capacity, they may not be able to take in additional non-subsidised HD patients, who wish to switch from the merged entity to the VWO dialysis centres.

39. On the other hand, it is arguable that the Target has already largely increased prices pre-merger, as the merger increment is small, about [0-10]%, from [70-80]% to [70-80]%, based on a narrower market excluding VWOs, and the merged entity will not be able to raise prices. Furthermore, CCS notes that there are a large number of private dialysis centres that provide for about [0-10]% of the patients, and the patient will be able to switch from the merged entity to another private dialysis centre.

40. Alternatively, CCS also considered that the market definition could be wider to include both HD and PD treatment, and observed that the figures were not significantly different in terms of market shares for the merger parties. In fact, the market shares of the merger parties for HD and PD treatment is smaller as opposed to for HD treatment alone. The incremental increase is also smaller for HD and PD treatment, about [0-10]% vis-a-vis the [0-10]% increase for the narrower market of HD treatment, excluding VWOs. Hence, CCS has found that its assessment does not change, whether or not it adopts a narrower or broader definition of the market (see paragraph 47 below), because the increase in market share of the merging parties is marginal.

41. The Respondents said that barriers to entry in relation to the industry of kidney dialysis treatment services in Singapore include complying with the regulatory requirements stipulating the nephrologists and manpower required in the establishment of centres,[23] the product registrations and equipment maintenance required and the costs of setting up dialysis centres. MOH states that any company can apply to provide kidney dialysis services. The licence for the operation of kidney dialysis services can be issued relatively quickly as long as the licensing requirements are met.[24] The limiting factor, however, is the readiness of the provider to provide services and this depends on the provider's business set-up arrangement including securing of the necessary resources for operation.

[23] The operation and licensing of medical clinics is regulated by the Private Hospital and Medical Clinics Act (Cap 248) and the Guidelines for Private Healthcare Institutions Providing Renal Dialysis ("Guidelines For Institutions Providing Renal Dialysis"), attached in Appendix 19 of the Applicants' response dated 31 May 2010.

[24] According to the Guidelines For Institutions Providing Renal Dialysis, Reg 1.21 the application for licence to operate a kidney dialysis centre should be submitted at least 30 days before the intended commencement of operations of the renal dialysis centre.

42. In order to apply for a licence to import and sell machines and medical products for HD and PD a company has to be certified to be Good Distribution Practice for Medical Device in Singapore ("GDPMDS")[25]. With the GDPMDS licence, the importer can proceed to apply for an establishment licence from Health Sciences Authority to import and sell the HD machines and products within Singapore. The application and approval process for the GDPMDS may cost $2,300 to $11,900[26] for product registration fees and distribution and wholesale licenses and takes about 1 year to complete. One of the Respondents stated that the registration costs of machines may also discourage entrants from entering the market.

43. One of the Respondents also indicated that a key barrier to entry is having adequate manpower, namely the recruitment of doctors and nurses to run the dialysis centres, while another Respondent stated that the merger will increase competition for medical nursing staff.

44. CCS is of the view that the competition in hiring doctors and medical staff is not a sufficient consideration to stop the Transaction. CCS notes that a doctor may be responsible for more than one dialysis centre, and that the MOH dialysis centre requirement is 1 doctor for every additional 150 patients, and if any of the existing dialysis providers chooses to expand their capacity beyond their current operation limit, or a new dialysis provider enters the market, there will also be competition for the doctors and medical staff to join them. The Applicants have also cited to CCS examples of two new providers of HD treatment having been able to enter the market since 2007. While it may be one of many factors when considering the costs of running a dialysis centre, it is not an insurmountable issue that prevents the existing dialysis service providers from expanding or preventing prospective dialysis service providers from entering the market.

45. Besides providing dialysis services at their own dialysis centres, the Purchasers and the Target also provide dialysis services at dialysis centres that are not owned by them. CCS notes that where the merger parties were previously rivals in the business of providing dialysis services, the merger will reduce the availability of alternative dialysis service suppliers for some customers (who are the owners of dialysis centres).

46. These customers will have to source for other providers of such services or re-think their business processes on operating dialysis centres, after the expiry of their existing contracts with the merger parties. Where the ultimate objective of these customers is to provide dialysis services at the most affordable prices, the merged entity will be restrained in its ability to raise prices or reduce quality or output, as these customers may choose to run the dialysis centres themselves instead of passing any higher dialysis service costs to the patients. In this connection, one of the Respondents also informed CCS that they have the capability to set up and operate

[25] A list of independent third party certification bodies performing the certification to GDPMDS can be found at the Singapore Accreditation Council (SAC) website http://www.sac-accreditation.gov.sg/directory.asp?Type=1 The SAC is the national agency for accreditation of conformity assessment bodies.
[26] Appendix 21 of Form M1 Health Sciences Authority – Medical Device Industry Briefing – 26 April 2010

dialysis centres, and it is possible that a tender for the management of dialysis centres may attract new entrants into the market.

47. CCS notes that ESRD patients undergoing HD treatment in non-subsidised centres may have the option to switch to PD treatment if the merged entity increases the price for HD treatment, provided they can meet the medical considerations. One of the Respondents informed CCS that the number of renal patients undergoing PD treatment in Hong Kong is very much higher vis-a-vis in Singapore, due to the high infrastructure costs in Hong Kong, where there are fewer dialysis centres to provide HD treatment and thus renal patients tend to opt for PD treatment.[27] Another Respondent informed CCS that patients may switch to PD treatment despite the lack of subsidy if the merged entity increases the price for HD treatment. CCS notes that patients in subsidised centres such as VWOs who satisfy the criteria for treatment at VWOs would be able to switch between the different VWOs for HD and PD treatment as two VWOs, namely NKF and KDF, offer both HD and PD treatments.

48. In light of the above discussion, CCS is of the view that the barrier to entry to set up dialysis centre is low. CCS is also of the view that non-coordinated effects are unlikely to arise.

### *(b) Coordinated Effects*

#### *Applicants' submissions*

49. The Applicants submit that the risk of coordinated effects resulting post-merger, that the HD services providers in Singapore may coordinate their behaviour to raise prices, or reduce quality or output, is not a real one. This is because the ultimate objective of VWOs and public hospitals is not to obtain greater benefits, but rather to provide better services at the most affordable prices, whatever the 'competitors' may do.[28]

#### *CCS' assessment*

50. On the facts of the case, CCS is of the view that the risks of coordinated behaviour are largely mitigated by the low barriers to entry and the fact that most ESRD patients have the option to switch to PD treatment, as discussed above. CCS also notes that the increase in market concentration arising from the Transaction is incremental and the Transaction will not lead to a significant change to the existing structure of the market.

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[27] International Society for Peritoneal Dialysis publication, Peritoneal Dialysis International 27 (Supplement_2): 59-61 2007, Increased Utilization of Peritoneal Dialysis to cope with Mounting Demand for Renal Replacement Therapy – Perspectives from Asian Countries. www.pdiconnect.com/cgi/content/full/27/Supplement_2/S59.
[28] Paragraph 3.2B(3) of Form M1.

### (c) *Non-Horizontal issues*

*Applicants' submissions*

51. The Applicants submit that the Transaction will not lead to a substantial lessening of competition due to vertical integration. The Purchasers provide a complete line of dialysis services and products in Singapore and worldwide. In Singapore, the Purchasers supply HD products as well as PD products. The Applicants also submit that that HD products and PD products fall into separate markets. The Applicant is of the view that for each product, the market is worldwide, and that the use of HD products and PD products are mutually exclusive. In other words, a patient of HD kidney dialysis treatment cannot use PD products for his HD treatment and vice versa unless the patient elects to change from one form of treatment to the other after meeting the medical considerations. From a supply perspective, the Purchasers supply its products from various locations outside Singapore, and the Purchasers' competitors are located worldwide.[29] The Target, however, does not supply dialysis products in Singapore (or elsewhere). Therefore, the market share of the merged entity in HD products and PD products, whether worldwide or in Singapore, will amount to the Purchasers' pre-merger market share.

52. The Applicants have submitted information on its estimated market share, and those of its 3 largest competitors in Singapore and worldwide, and that they are the second largest supplier of HD products in Singapore.[30] This is illustrated in the tables below:

| 2009 | HD products (Singapore) (in S$) | Market share (Singapore) (%) | HD products (Worldwide) (in S$) | Market share (Worldwide) (%) |
|---|---|---|---|---|
| Gambro | [✂] | [30-40]% | [✂] | [10-20]% |
| FMC KGaA | [✂] | [10-20]% | [✂] | [20-30]% |
| B Braun | [✂] | [10-20]% | [✂] | [0-10]% |
| Nipro | [✂] | [10-20]% | [✂] | [0-10]% |

| 2009 | PD products (Singapore) (in S$) | Market share (Singapore) (%) | PD products (Worldwide) (in S$) | Market share (Worldwide) (%) |
|---|---|---|---|---|
| Baxter | [✂] | [90-100]% | [✂] | [70-80]% |
| FMC KGaA# | [✂] | [0-10]% | [✂] | [10-20]% |

#FMC KGaA did not have data in relation to other competitors in the market.

53. The Applicants cited paragraph 8.4 of CCS Guidelines on the Substantive Assessment of Mergers, at page 25 of their Form M1, saying that

> "the vertical aspects of acquisitions leading to vertical integration are generally efficiency-enhancing and unlikely to result in a SLC in a market, unless market power exists at one of the affected functional levels. [...] A vertically-integrated firm may be

[29] Paragraph 6.1B of Form M1.
[30] Paragraph 8.1 of Form M1.

able to foreclose rivals from either an upstream market for selling inputs or a downstream market for distribution or sales".

54. The Applicants state that the merged entity does not enjoy market power in the market for the provision of the dialysis products market(s). In relation to HD products in particular, the merged entity faces strong worldwide competitors such as Gambro, B Braun or Nipro, which are large international players. The Applicants submit that the merged entity will have less than [20-30]% market share in the HD Products market in Singapore, far from the leader, Gambro, which owns almost [40-50]% market share in this market in Singapore. As such, there is no likelihood that the merger will result in FMC KGaA being able to foreclose rivals from the HD products upstream market for selling inputs or the downstream market for provision of HD services.

55. The Applicants also highlight that the main provider of HD services in Singapore, i.e. NKF, commands a [60-70]% market share of the HD services market and enjoys, therefore, substantial buyer power. In addition, NKF procures the products it needs for the provision of HD services essentially through public tenders in which all providers, whether established in Singapore or not, can participate. Hence, the risk that HD products' prices will rise as a result of the transaction is not even foreseeable.

56. The Applicants submit that the market for HD products is a worldwide market. Based on FMC KGaA's internal research, the HD products market in Singapore represents only 0.13% of the worldwide HD products market. This means that the risk of the merger resulting in a substantial lessening of competition in the worldwide HD market due to any degree of vertical integration in Singapore is completely absent.

***CCS' assessment***

57. CCS is concerned with mergers that may be expected to result in a substantial lessening of competition within any market in Singapore. Based on the information provided by the Applicants, CCS notes that post-merger, the merged entity will have less than [10-20]% market share in the HD products market and less than [0-10]% market share in PD products in Singapore.

58. However, one of the Respondents stated that FMC is the market leader in the HD products market, and pegged FMC's market share in HD products at [70-80]%. Another Respondent replied that the market leaders in the HD products market as determined by sales turnover are FMC, B Braun and Gambro respectively.

59. Some Respondents expressed concerns that they would be foreclosed from supplying their equipment and products to existing dialysis centres run by the merged entity and future dialysis centres of the merged entity. Post-merger, the merged entity will be providing dialysis services in [✂] out of the 58 dialysis centres in Singapore. There is a significant increase (from [✂] to [✂]) in the number of dialysis centres

owned or operated by FMC KGaA. CCS notes that if these dialysis centres operated by the merged entity had not previously been using FMC KGaA's products, and switched to purchase products only from FMC KGaA, the market share of FMC KGaA's competitors in Singapore will be reduced.

60. Nevertheless, CCS notes that the merged entity is only providing dialysis treatment to about [20-30]% of ESRD patients, and the competitors can continue to supply the kidney dialysis equipment and products to the dialysis centres of VWOs and restructured hospitals and private dialysis centres that are not run by the merged entity. It should also be noted that some Respondents stated they would carry out tenders to determine the appropriate supplier to award the contract for the supply of kidney dialysis machines and the corresponding products or consumables.

61. Therefore, on the facts of the case, CCS is of the view that the competitors are not foreclosed from providing products to the dialysis centres providing treatment for the majority of ESRD patients i.e. [70-80]% in Singapore. Based on the information provided by the Applicants, these competitors are large international players with a market share of [60-70]% in HD products and [90-100]% in PD products in Singapore, and can act as a reasonable alternative to the merged entity. CCS is of the view that the barriers to entry are low, as it is relatively easy to apply for a licence to import and sell machines and medical products for HD and PD.

## VIII. ANCILLARY RESTRICTIONS

62. The Applicants have also notified 2 ancillary restrictions to CCS. The Applicants have agreed to a non-compete obligation post merger under the SPA.[31] The maximum duration of the restrictions is [✂] years after the closing of the Transaction. [✂] The Applicants have stated that the ancillary restrictions are necessary for the implementation of the Transaction in order to provide the assurance to the Purchasers that the Sellers will not set up a competing business post merger and thereby reduce the value of the assets acquired, and the non-compete obligation has the normal scope in relation both to geography and duration for cases involving the sale of a business.

63. CCS has considered the above restrictions and in the context of the Transaction, is satisfied that they are directly related and necessary to the implementation of the Transaction and fall under the exclusion in paragraph 10 of the Third Schedule.

[31] Clause 12 of the Share Purchase Agreement attached at Appendix 1 of the Form M1.

## IX. CONCLUSION

64. Based on the information available to CCS, and for the reasons stated above, CCS has assessed that the Transaction, if carried into effect, will not infringe the section 54 prohibition of the Act. In accordance with section 57(7) of the Competition Act, this decision shall be valid for a period of one year from the date of this decision.

Teo Eng Cheong
Chief Executive
Competition Commission of Singapore