EN

Case No COMP/M.5999 - SANOFI-AVENTIS/ GENZYME

Only the English text is available and authentic.

REGULATION (EC) No 139/2004
MERGER PROCEDURE

Article 6(1)(b) NON-OPPOSITION
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PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party:

Dear Sir/Madam,

Subject: Case No COMP/M.5999 - Sanofi Aventis/ Genzyme
Notification of 29 November 2010 pursuant to Article 4 of Council Regulation No 139/2004[1]

1. On 29 November 2010, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 by which the undertaking Sanofi-Aventis ("Sanofi-Aventis", France) acquires within the meaning of Article 3(1)(b) Merger Regulation sole control of the undertaking Genzyme Corporation ("Genzyme", US), by way of public bid.

I. THE PARTIES

2. Sanofi-Aventis is active in the development, production, distribution and marketing of pharmaceuticals, human vaccines, and animal health products.

3. Genzyme is active in the research, development, manufacture and sale of pharmaceuticals, in particular biotechnology products used in the treatment of rare genetic diseases, cardiometabolic and renal diseases, biosurgery and hematologic oncology and multiple sclerosis.

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[1] OJ L 24, 29.1.2004, p. 1 ("the Merger Regulation"). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this decision.

II. THE OPERATION

4. The proposed transaction concerns an acquisition of sole control by Sanofi-Aventis of Genzyme by way of a public bid for all issued and outstanding shares. The tender offer was filed on 4 October 2010 with an initial deadline of 10 December 2010. The deadline was subsequently extended to 21 January 2011.

5. The transaction constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

IV. EU DIMENSION

6. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million[2]. Each of them has an EU-wide turnover in excess of EUR 250 million, but they do not achieve more than two-thirds of their aggregate EU-wide turnover within one and the same Member State. The notified operation therefore has an EU dimension.

V. COMPETITIVE ASSESSMENT

1. INTRODUCTORY REMARKS ON RELEVANT PRODUCT MARKETS

A. Finished Dose Pharmaceuticals

7. The parties' activities overlap in a number of therapeutic areas, typically in drugs used to treat serious illnesses and used to a great extent by hospitals. The main areas of overlap include leukaemia; immunostimulants (in particular used in stem cell transplants); immunosuppressants against the rejection of solid cell transplants (i.e. organ transplants); treatments for excess phosphate and excess potassium; and diagnostic tests relating to the thyroid. The parties have a potential overlap due to pipeline products in the treatment of multiple sclerosis (MS).

1.1. ATC classification

8. In previous decisions[3], the Commission noted that pharmaceuticals may be subdivided into therapeutic classes by reference to the "Anatomical Therapeutic Chemical" classification ("ATC"), devised by the European Pharmaceutical Marketing Research Association ("EphMRA") and maintained by EphMRA and Intercontinental Medical Statistics ("IMS"). The ATC has 16 categories (A, B, C, D etc.) each with different levels[4]. At the third ATC level ("ATC3"), pharmaceuticals are grouped in terms of their therapeutic indication, i.e. their intended use. This level has in the past been generally

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2 Turnover calculated in accordance with Article 5 of the Merger Regulation.

3 See for example COMP/M.5865 *Teva/Ratiopharm,* decision of 3 August 2010; M.5661 *Abbott/Solvay* decision of 11 February 2010; M.5253 - *Sanofi-Aventis/Zentiva* decision of 4 February 2009; and further decisions quoted therein.

4 The first level/category of the ATC indicates the anatomical main group. The second level indicates the main therapeutic group. The third level indicates the therapeutic/pharmacological subgroup while the fourth level indicates the chemical/therapeutic/pharmacological subgroup. The first level (ATC1) categories are subdivided into ATC2 categories, which are in turn sub-divided into ATC3 categories. Some ATC3 categories are sub-divided into ATC4 categories, whereas some others are not.

used as the starting point for investigating and defining relevant product markets in competition cases, in particular, for competition between innovator companies.

9. However, it is appropriate to carry out analyses also at other ATC levels, or a mixture thereof, if the circumstances of a case show that sufficiently strong competitive constraints faced by the undertakings involved are situated at another level and there are indications that the ATC3 class does not lead to a correct market definition.[5] The Commission has previously departed from the ATC3 class in its assessment in cases where the market investigation indicated that another market definition was more appropriate, for example the ATC4 class[6] or medicines based on the same active pharmaceutical ingredient (molecule level) [7] or medicines used for the treatment of a particular disease (irrespective of their ATC classification)[8].

10. None of these levels was a priori excluded as a possible basis for market definition in the present case. The parties were consequently requested to identify affected markets based on all possible levels, including ATC3, ATC4, molecule and according to indications (type of disease) when this did not seem to correspond to any one ATC3 or ATC4 class. The appropriateness of these levels for market definition purposes depends on the market concerned and will be addressed separately under each product market category.

1.2. Prescription pharmaceuticals and over-the-counter pharmaceuticals

11. In the past, the Commission has considered that drugs available over-the-counter ("OTC") – i.e. without prescription – normally belong to a different product market than drugs available only on prescription ("Rx").[9]

12. As the markets assessed in the present case relate to the treatment of serious diseases, the OTC/Rx distinction is not relevant for the assessment.

1.3. Different galenic forms/routes of administration

13. As already noted in *Sanofi-Aventis/Zentiva*, medicines are differentiated not only by their active ingredient(s), but also, in particular, as recognized by the European regulatory framework for medicines for human use, by their dosage, pharmaceutical

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5 See for example cases COMP/ M.5502 *Merck/Schering Plough* decision of 22.10 2009 *Sanofi-Aventis/Zentiva op cit.*

6 ;*Sanofi-Aventis/Zentiva op cit.*.

7 See e.g. cases; *Teva/Ratiopharm op cit.* and COMP/M.5295 *Teva/Barr* decision of 19 December 2008.

8 See e.g. Multiple Sclerosis in Case COMP/M.4049 *Novartis/Chiron*, Commission Decision of 6 February 2006 and MrCC in Case COMP/M.5476 Pfizer/Wyeth decision of 17 July 200.9

9 See e.g. cases *Merck/Schering Plough op cit*; Sanofi-Aventis/Zenzive *op cit*.; COMP/M.3544 *Bayer Healthcare/Roche* decision of 19 November 2004; COMP/M.3394 *Johnson & Johnson/Johnson & Johnson MSD Europe* decision of 29 March 2004.

form and route of administration and this may limit their substitutability[10] (collectively referred to as "galenic form" in the remainder of this decision).

14. In the present case, the market definition can be left open regarding galenic form and, in particular, route of administration as the transaction does not raise competition concerns irrespective of whether drugs with different galenic forms/routes of administration are considered to belong to the same or separate product markets.

1.4. Biopharmaceuticals vs small molecule/chemical drugs

15. Biological medicinal products are medicines whose active substance is made by or derived from living organisms (e.g. immunological products and medicines derived from human blood and plasma). Whilst Genzyme has a focus on biopharmaceuticals, Sanofi-Aventis has only […] biopharmaceutical products. The parties' biopharmaceuticals do not overlap in any market and competition concerns can be excluded based on a market definition including both biopharmaceuticals and small molecule/chemical products. The market definition can therefore be left open in the present case.

B. Active Pharmaceutical Ingredients

16. In previous decisions the Commission has considered that APIs form separate markets which are upstream of the markets of finished dose pharmaceutical products.[11] The Commission has generally looked at each individual API as potentially constituting a relevant market by itself, whilst noting that it cannot be excluded that certain APIs may be substitutable with each other for all, or for a range of, applications.

17. In the present case, the market definition can be left open, since no competition concerns arise irrespective of the market definition.

2. INTRODUCTORY REMARKS ON RELEVANT GEOGRAPHIC MARKETS

A. Finished Dose Pharmaceuticals

18. The Commission has previously defined geographic markets for pharmaceutical products as being national in scope, inter alia on the basis of the different national regulatory frameworks, authorisations procedures, reimbursement rules, etc.[12] There are no specific circumstances in the present case that would indicate any need to depart from this market definition.

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10 See recital 20 of the decision and Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use (OJ L 311, 28.11.2001, p. 67), as amended by various subsequent acts.

11 See for instance Case COMP/M.3394 Johnson & Johnson/Johnson & Johnson MSD Europe, Commission Decision of 29 March 2004; *Novartis/Hexal*; *Teva/Barr*; *Sanofi-Aventis/Zentiva*, recital 179.

12 See *Sanofi-Aventis/Zentiva op cit*, *Teva/Barr op cit*; and Novartis/Hexal *op cit*.

B. Active Pharmaceutical Ingredients

19. The Commission has previously considered that markets for the provision of APIs are wider than the markets for finished dose pharmaceuticals and possibly worldwide[13]. The exact scope of the geographic market can be left open as serious doubts do not arise either on the basis of an EEA-wide market, or of a worldwide market.

3. INTRODUCTORY REMARKS ON THE COMPETITIVE ASSESSMENT

Horizontal effects

20. This decision addresses all product markets where the combined market share of the parties is 15% or over at the ATC3 and/or ATC4 and/or molecule level in one or more Member States. The Parties identified the following ATC3 classes in finished dose pharmaceuticals where the transaction would lead to combined market shares of 15% or higher based on ATC3 and/or ATC4 level: L1B (Antimetabolites); L3A (Immunostimulating Agents excluding Interferons); T2X (All Other Diagnostic Tests); V3G (Hyperkalaemia/Hyperphosphataemia products). There are no special circumstances which would call into question the assumption that competition concerns are unlikely to arise in markets where the combined market share of the parties is below 15%.[14]

21. In addition the following overlaps are also specifically assessed below:

    a) Overlaps in national markets where the market definition may not correspond to the ATC classification as also indicated by previous Commission decisions (Multiple Sclerosis[15], Oncology[16]- Leukemia, Immunostimulants[17], Immunosuppressants[18]).

    and

    b) Potential overlaps due to pipeline products. This includes situations where i) both parties have pipeline products in an advanced stage of development (Phase III) and/or ii) one party has a Phase III pipeline and the other has a significant presence in one or more national markets (with market shares exceeding 35%). This criterion is met only in the case of treatments for Multiple Sclerosis.

22. All overlaps meeting the criteria in recitals 20 and/or in 21 above that were identified by the Notifying Party are assessed below. The market investigation did not show any other horizontal overlaps that would give rise to significant combined market shares (of 15%

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13 *Sanofi-Aventis/Zentiva op cit.*, recital 186

14 Commission Notice on a simplified procedure for the treatment of certain concentrations under Council Regulation (EC) No 139/2004 (OJ C56 5.3.2005)

15 *Teva/Ratiopharm op cit.;*

16 *Pfizer/Wyeth op cit.*

17 *Teva/Ratiopharm op cit.*

18 *Novartis/Chiron op cit.*

or over) and/or would raise possible concerns due to potential competition (pipeline products).

Non-horizontal effects

23. The Commission has previously focussed its assessment of vertical relationships on contract manufacturing and APIs[19]. Based on the information provided by the parties, are no significant effects in these areas which would raise competition concerns(an assessment of any potential vertical links due to APIs is provided in Section 4.7 below) Neither the Notifying Party nor the market investigation identified any other vertically affected markets [20]. There are no special circumstances in the present case that would call into question the assumption that competition concerns are unlikely to arise due to the lack of vertically affected markets. Potential or existing vertical links other than those discussed in Section 4.7 will therefore not be addressed further.

24. One respondent raised the issue of possible conglomerate effects for products used in the treatment of renal diseases. This will be addressed in the appropriate section below (*Section 4.6.- Treatments for excess phosphate and excess potassium*).

4. ASSESSMENT OF RELEVANT MARKETS

4.1. A. Multiple sclerosis

Market definition

25. In *Novartis/Chiron*, the Commission examined markets relating to the treatment of multiple sclerosis (MS)[21]. Disease-modifying agents that address the immunological causes of MS were considered to belong to a separate product market than products that relieve only the symptoms of MS. This was confirmed in the present market investigation.

26. The present transaction concerns disease-modifying drugs. In *Novartis/Chiron*, the Commission considered the possibility that this market may be further subdivided according to the mode of action of the respective drugs (immunosuppressants vs immunostimulants), but this was left open.

27. The Notifying Party concurs that disease-modifying agents form a separate market. However, the Notifying Party lists a number of differentiating factors (e.g. side effects, route and frequency of administration, efficacy) that in its view limit the substitutability and hence the competitive relationship between different disease-modifying products.

28. The Notifying Party submits that there are four different types of MS. These are Relapsing-Remitting (RRMS); Secondary Progressive; Primary Progressive; and

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19 See for example *Sanofi Aventis/Zentiva op cit*; *Teva/Barr op cit*.

20 Sanofi-Aventis provides some limited services to Genzyme in France as a legacy of a sale of a business unit (two products) to Genzyme in 1997, such as a leasing of a building and some remaining quality control services., which according to Sanofi, are being phased out and will terminate in[…].

21 *op cit.*

Progressive Relapsing. RRMS is the initial type of MS that occurs in 85% of patients. Secondary progressive MS is a later stage of MS that occurs in RRMS patients. The other two forms of MS are relatively rare. Based on the market investigation, this categorisation is generally the accepted categorisation in the medical profession.

29. It appears from the market investigation that RRMS is almost the only approved indication for MS treatments with very limited exceptions (e.g. Bayer's *"Betaseron"*, an interferon-β product, which seems to be indicated also for secondary progressive MS). Genzyme's pipeline product is also tested for RRMS and the market investigation did not indicate any significant existing or potential use for any other types of MS. Similarly, the market investigation has shown that the existing and pipeline product of Sanofi-Aventis is also indicated for RRMS as well as other existing and pipeline products. Whether the market should further be segmented according to the type of MS can therefore be left open as the transaction does not raise concerns irrespective of this distinction.

30. The market investigation indicated that the key aspects that determine the use of disease-modifying MS drugs are efficacy and side effects/therapeutic risks. In particular, the use of an MS drug with very serious side effects may be limited to situations where it is necessary to use that particular drug due to its other attributes (efficacy) and/or render the use of the drug as a second or third line treatment (once a first/second line treatment has failed). The frequency and route of administration was indicated to be more of a secondary, but not a decisive criterion in selecting a treatment and does not therefore appear to affect substitutability of different drugs to such an extent as to merit the delineation of separate markets on this basis.

31. However, for the purposes of the present case, it is not necessary to decide whether different attributes of disease-modifying MS drugs (e.g. efficacy, side effects, route and frequency of administration) constitute relevant parameters for defining product markets as the transaction would not raise competition concerns irrespective of how the market is defined.

32. In conclusion, the market definition can be left open as the transaction does not raise competition concerns based on any possible distinction.

Competitive assessment

33. The transaction does not lead to any existing overlaps as Genzyme is not yet active in the treatment of MS. Sanofi currently distributes in the EEA one of the existing disease modifying drugs developed by Teva (Copaxone). However, Sanofi achieves a market share of over 35% of all disease modifying MS drugs only in Austria[22] . In any event, the Notifying Party submits that its agreement with Teva expires in February 2012[23] and that Teva will reclaim distribution rights for the product.

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22 Sanofi-Aventis[30-40%]; Biogen [40-50%]; Bayer[10-20%].

23 In some countries the agreement expires earlier.

34. The Notifying Party provided internal documents (correspondence between Teva and Sanofi-Aventis) that show that Teva does not intend to extend the distribution agreement beyond 2012. This was also confirmed by Teva. In fact, in some countries, where the agreement already expired, Teva has already taken back distribution rights for the product.

35. However, even in the hypothetical scenario that Sanofi-Aventis continued the distribution of Copaxone (which is not the case), the transaction would not raise competition concerns (see recital 44 below).

36. There are currently only a limited number of disease-modifying MS drugs on the market. Besides *Copaxone* (a small molecule drug), there are a number of biopharmaceuticals based on interferon-β[24]: Biogen's *Avonex*; Bayer's *Betaseron* and Merck Serono's *Rebif*. In addition, Biogen has another biopharmaceutical *Tysabri*[25] on the market. This drug is generally used more often as a second or third line treatment. In addition, chemotherapy drugs, such as *mitoxantrone,* are also used to some extent for the treatment of MS, especially for more aggressive types.

37. All current disease-modifying MS drugs require parenteral administration.

38. Both parties have pipeline products that have reached the final development phase (Phase III - clinical trials). In previous decisions[26] relating to originator pipelines, a pipeline was considered to be in a sufficiently advanced stage of development to be considered as a possible competitive constraint when it reached this phase.

39. Genzyme is conducting Phase III trials of an RRMS therapy based on *alemtuzumab*[27]. The Notifying Party expects this drug to be launched in the second half of 2012 in the EEA. As Teva will not renew the distribution agreement for Copaxone, there will therefore be no overlap between Copaxone and alemtuzumab.

40. Sanofi-Aventis has, on the other hand, a brand new MS drug in development (teriflunomide) that is a small molecule/chemical drug (not a biopharmaceutical). The planned launch date is 2013.

41. Whilst alemtuzumab is an immunosuppressant, Copaxone is an immunostimulant. There is no overlap between Copaxone and alemtuzumab based on this distinction. The Notifying Party submits that, based on the current state of clinical knowledge (trials are still ongoing), it is difficult to definitively characterise teriflunomide as either an immunosuppressant or immunostimulant. It is likely that teriflunomide will have both immunosuppressive and immunostimulating effects. Due to these uncertainties, the

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24 Interferons are biopharmaceuticals that have immunostimulating properties. They have their own ATC3 category, L3B. Different type of interferons (e.g. interferon-α, interferon-β) are listed in different ATC4 categories in L3B.

25 Tysabri is based on the monoclonal antibody "natalizumab". Monoclonal antibodies are different types of biopharmaceuticals as compared to interferons and are classified under different ATC3 categories.

26 See for example *Merck/Schering Plough op cit. or Pfizer/Wyeth op cit.*

27 Also a monoclonal antibody as is the case with Tysabri. Genzyme already has an existing drug based on alemtuzumab, which is approved for the treatment of leukemia (the brand name is *MabCampath*).

closeness of competition between alemtuzumab and teriflunomide is therefore assessed based on a number of other criteria.

42. The Notifying Party submits that alemtuzumab and teriflunomide are not expected to be close (or even direct) competitors for the following reasons. *Firstly*, alemtuzumab is expected to be used for more aggressive types of MS, whereas teriflunomide will be used for less aggressive types. *Secondly*, […]. *Thirdly*, the two drugs have different routes and frequency of administration. Teriflunomide is a once-a-day oral medication, while alemtuzumab is a once-a-year parenteral (intravenal) drug. […]

43. Overall, the market investigation also indicated differences between the parties' two pipeline products and confirmed that teriflunomide and alemtuzumab would be only more distant competitors. The coming to market of several other pipelines was also confirmed. The market investigation indicated a number of products (existing and pipeline) for each of the parties' two pipeline products that would be closer competitors than the other pipeline. The market investigation did not show any product characteristic based on which the parties' two pipelines would be particularly close competitors or any significant advantages both pipelines would have as compared to other products.

44. With respect to the competitive relationship between Copaxone and alemtuzumab the market investigation also confirmed that these products were not potentially close competitors and that Copaxone would only be a distant competitor for alemtuzumab once the latter is launched. On the other hand, Copaxone appears to be potentially a close competitor to teriflunomide (together with a number of other existing and pipeline products). Based on the market investigation, it does not, therefore, appear that the competitive pressure stemming from alemtuzumab on Copaxone would be more significant than the competitive pressure stemming from other existing and pipeline products. In other words, it appears that a sufficient number of other existing or potential competitors would remain and would maintain a sufficient competitive pressure after the merger. The transaction would not therefore raise competition concerns even if Sanofi-Aventis continued to distribute Copaxone (which is not the case based on the evidence provided – see recitals 34 and 35 above).

45. Therefore, the competitive constraint likely to be exercised by Sanofi-Aventis on Genzyme or *vice versa* once their pipeline products are launched would not likely be stronger that the competitive pressure stemming from other (existing or pipelines) products.

46. In light of the above, the Commission therefore concludes that the merger does not raise serious doubts in the market for disease-modifying MS treatments.

4.2. Oncology (Leukaemia)

Market definition

47. The Commission previously examined oncology drugs and found the ATC3 level market definition not to be appropriate.[28]

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[28] See *Teva/Barr op cit; Pfizer/Wyeth op cit*; *Case* COMP/M.3354 – Sanofi-Synthélabo/Aventis decision of 26 April 2004.

48. In one case involving the merger of two generic companies, the Commission defined the market at the level of the molecule (main active pharmaceutical ingredient) for some genericised and mature chemotherapy drugs[29], including drugs based on the molecule *methotrexate*. In other cases involving originator oncology drugs[30], the Commission considered the possibility of defining the market based on the type and stage of cancer.

49. In the present case, the market definition can be left open as the transaction does not raise serious doubts under any alternative market definition.

Competitive assessment

50. Based on the type of cancer, the parties only overlap in the treatment of leukaemia[31] in *France*. Leukaemia is different from other types of cancers because the cancerous tumours are not solid. The parties do not overlap on the molecule level and based on the ATC3 classification, the transaction gives rise to only one affected market in the ATC3 class L1B (antimetabolites) in France where the parties have a combined market share of only [10-20%].

51. Sanofi-Aventis submits that there are four types of leukaemia. The parties' products overlap in the treatment of three types of leukaemia[32] accounting for the majority of cases.

52. Sanofi-Aventis has only one product for the treatment of leukaemia, based on the molecule methotrexate (L1B). Methotrexate has been available in the market for many decades and is a mature and genericised product as also recognised in a previous Commission decision[33]. This is also evident in the French market where Sanofi-Aventis' share of all methotrexate sales in France is only [10-20%] There are several other suppliers of methotrexate, including, for example, Teva and Mylan, which are large generic companies.

53. Genzyme supplies three products indicated for the treatment of certain types of leukaemia. These are based on the molecules of clofarabine (L1B), fludarabine (L1B) and alemtuzumab (L1X). Whilst alemtuzumab and clofarabine are not genericised, three generic versions of fludarabine have already come to market in France from three of the largest generic providers (Teva, Novartis and Mylan)[34].

54. According to Sanofi-Aventis, the combined market share of the parties would not reach 15% for the treatment of any of the three types of leukaemia where the parties' overlap

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29 *Teva/Barr op cit*.

30 *Sanofi-Synthélabo/Aventis op cit* – colorectal cancer (recitals 55-58); *Pfizer-Wyeth op cit* - Metastatic renal cell carcinoma (recitals 21-26).

31 Leukaemia is a broad term covering a spectrum of malignancies in the blood and bone marrow that are characterized by an abnormal increase of blood cells.

32 In one type, due to the off-label use of the Genzyme product.

33 *Teva/Barr op cit.*

34 Genzyme still has almost [80-90%] of all fludarabine sales with their originator product.

or for all leukaemia treatments considered together. Leukaemia is often treated with combinations of various drugs that are distinct in their efficacy, mode of action and side effects. Sanofi-Aventis lists a number of drugs for each type of leukaemia that may be used in treatment and argues that methotrexate and Genzyme's respective products are not close substitutes based on differences in efficacy and side effects which also impacts on whether the drugs are used as first, second or even third line therapy. The results of the market investigation (mainly competitors) confirmed this view and that the parties' products are not close competitors.

55. In light of the above, the Commission concludes that the merger does not raise serious doubts in the markets for the treatment of leukaemia, the treatment by type of leukaemia, or ATC class L1B..

4.3. Immunostimulants excluding interferons (L3A)

Market definition

56. The ATC3 class L3A comprises various immunostimulating agents[35]. It is sub-divided into two ATC4 categories. The ATC4 category L3A1 includes colony-stimulating factors (G-CSFs). G-CSFs are used to stimulate the formation of blood cells, in particular white blood cells. They have a mode of action specific to this group of products. L3A9 includes all other immunostimulating agents (with different indications), including the disease-modifying MS drug, glatiramer acetate, which Sanofi-Aventis currently distributes for Teva (see recital 33 above).

57. The Commission has recently assessed L3A products in *Teva/Ratiopharm* and concluded that the ATC3 class was not relevant for market definition. In particular G-CSFs are not in the same product market as the MS drug, glatiramer acetate.

58. In addition to glatiramer acetate, Sanofi-Aventis also distributes a type of G-CSF (*lenograstim*) for Roche in Finland and Austria. There are other types of G-CSFs, the most common being short and long-acting versions of filgrastim. In *Teva/Ratiopharm*[36], lenograstim has been indicated as a possible substitute for filgrastim.

59. Genzyme supplies a new product in the L3A9 ATC4 class based on the molecule *plerixafor*. Plerixafor has clearly different indications than the MS drug glatiramer acetate despite the fact that both drugs are classified in the same ATC4 category. An assessment on the ATC4 level is therefore not relevant in this case.

60. On the other hand, the Notifying Party submits that both plerixafor (L3A9) and lenograstim (L3A1) are used in procedures preceding the transplant of self-renewing cells in the bone marrow, which is sometimes required following chemotherapy. This notwithstanding, their use is complementary. In particular, plerixafor is used in combination with G-CSFs (including lenograstim) when G-CSFs alone are not sufficient to achieve the desired results.

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35 Except for a specific group of biological immunostimulants, so called "interferons", which have their own ATC3 category (L3B). Neither party supplies interferons.

36 *Teva/Ratiopharm op cit.*.

61. As discussed above, the Commission does not consider the ATC3 and ATC4 category to be relevant for market definition for L3A products owing to the clear difference in indications between certain products classified in these categories.

62. With respect to plerixafor and G-CSFs, the market investigation points towards complementary use as opposed to substitutability. In any event, no concerns would arise even if plerixafor were to be considered substitutable with G-CSFs. It does not therefore have to be decided for the purposes of the present decision whether plerixafor and lenograstim belong to the same or separate product markets as competition concerns do not arise under either assumption.

Competitive assessment

63. The parties would have small combined market shares in Austria and Finland ([0-5%] and [0-5%] respectively) even if plerixafor and G-CSFs together were considered to form a separate product market. This is because of the significantly stronger position of different versions of the leading G-CSF product *filgrastim*, still supplied primarily by the originator, Amgen (generic versions have recently entered the EEA market, as recently outlined in *Teva/Ratiopharm*[37]). The market investigation confirmed that the closest competitors to lenograstim are other G-CSFs (most importantly, filgrastim).

64. In light of the above, the Commission concludes that the merger does not raise serious doubts in the markets for immunostimulants used, in particular, in stem cell transplants, in Austria and Finland.

4.4. Immunosuppressants used in the treatment of rejection in organ transplants - solid cell transplants (L4X)

Market definition

65. Both parties are active in the field of immunosuppressants used in the treatment of the rejection in organ transplants. These immunosuppressants are developed in order to prevent and redress rejection of transplanted organs by the immune system. They are classified in ATC3 class L4X ("Other Immunosuppressants") which is not split further into ATC4 classes.

66. The Commission has previously considered the market for immunosuppressants for the treatment of rejection in organ transplants[38] which were at that time grouped into the ATC3 class L4A together with products of other indications[39]. In particular, the Commission considered in that case to subdivide treatments of organ transplant rejection into four categories[40], but ultimately left the market definition open.

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37 *Teva/Ratiopharm op cit,* recitals 230-243.

38 *Novartis/Chiron op cit*,, recital 20.

39 IMS has revised its classification of immunosuppressants, creating class L4X out of the category L4A, that encompassed a broader variety of drugs

40 These are: (1) Primary immunosuppressants for general organ transplant therapy (i.e. a primary treatment against organ rejection typically administered immediately following the transplant); (2) Induction immunosuppressants for general organ transplant therapy (i.e. a product that provides immediate redress

67. The Notifying Party has argued that this delineation was not meaningful as it is of the opinion that there is currently a wide variability in the treatment protocols and no clear distinction between prophylactic treatment and remedial treatments. The Notifying Party therefore argues that a more accurate definition would correspond to the ATC3 class L4X. Alternatively, it considers that the market could be delineated according to the mode of action. The more common types of immunosuppressants used in the treatment of rejection in organ transplants are, according to their mode of action: (1) microbial inhibitors, (2) cytotoxic drugs and (3) immunosuppressive antibodies (which are classified both in the L4X and L1X ATC categories).

68. The results of the market investigation were not conclusive as regards market definition, although a majority of respondents agreed with the market definition adopted in *Novartis/Chiron*[41], i.e., that the four categories correspond to different types of immunosuppressive agents and could therefore constitute relevant product markets. However, a few respondents also underlined that many immunosuppressant products were used in combination for the prevention of rejection after solid organ transplantation and could thus often be used as alternative treatment options for each other.

69. For the purpose of the present case the market definition can be left open, as serious doubts do not arise under any alternative market definition.

Competitive assessment

70. The market investigation clearly indicated that the parties' products are significantly different. With reference to the categorisation system used in *Novartis/Chiron*, Sanofi's product Mycophenolate Motfetil falls under the category of accompanying immunosuppressants for general organ transplant therapy, whilst Genzyme's products (Thymoglobulin and the off-label use of Alemtuzumab) are Induction immunosuppressants for general organ transplant therapy. With reference to the definitions proposed by Sanofi-Aventis and by mode of action, Sanofi Aventis' product in this field is a cytotoxic drug while Genzyme's products are immunosuppressive antibodies.

71. Indeed, an overlap would only occur between the parties' products should the market be defined as including all products within the L4X category. On this basis, the only overlap between the parties would be in Spain where the combined market share of the parties would be only [0-5%][42]. Moreover, the market investigation has clearly shown that the products of the parties are not considered close competitors

72. In light of the above, the Commission concludes that the merger does not raise serious doubts in the markets for Immunosuppressants used in the treatment of rejection in organ transplants - solid cell transplants as ATC classification L4X in Spain.

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in episodes of acute rejection); (3) Accompanying immunosuppressants for general organ transplant therapy (i.e. a product that is administered complementarily) and (4) Accompanying immunosuppressants for specific transplant therapy.

41 *Op cit.*

42 Alemtuzumab is part of the L1X class and is used only in limited quantities, on an off-label basis, as an immunsuppresant for organ transplants. Sanofi-Aventis has no product in that category.

4.5. Diagnostic tests relating to the thyroid (T2X)

73. The parties also overlap in the ATC class T2X, a catch all category for all diagnostic products other than diabetes and pregnancy and ovulation tests. Within the T2X category, both Sanofi-Aventis and Genzyme supply products that fall in the ATC4 category T2X9 as they both produce a diagnostic product that relates in some way to the thyroid[43]. This notwithstanding, their products have different indications. Whilst the Sanofi-Aventis product is used for finding the exact cause of hyperthyroidism, Genzyme's product is used to detect thyroid cancer.

74. Sanofi-Aventis consequently argues that a third level or even fourth level ATC overlap only exists due to the catch-all nature of these classes and that the parties' products are very different and are not used for the same purpose. The results of the market investigation provide strong support for this view as all respondents agreed that Sanofi-Aventis' and Genyzme's products were not substitutable.

75. There are therefore no horizontal overlaps between the parties' activities with respect to diagnostic tests relating to the thyroid.

4.6. Treatments for excess phosphate and excess potassium (V3G)

Market definition

76. According to Sanofi-Aventis, this ATC3 class contains two distinct types of products that are not substitutable: treatments for excess phosphate on the one hand and for excess potassium on the other. These disorders may occur in patients whose chronic kidney failure impedes the normal urinary excretion of phosphate and potassium. The market investigation clearly confirmed the lack of substitutability between the two types of products. The Commission therefore concludes that the ATC classification is not a relevant basis for defining the markets for phosphate and potassium binders and the starting point appears to be the type of substance targeted by the particular drug (phosphate and potassium).

77. Whilst Sanofi-Aventis has products used to treat excess potassium (Kayexalate and Calcium Reson), Genzyme's sevelamer-based products in this class (sold under the brands Renagel and Renvela) are used to treat excess phosphate. There are therefore no horizontal overlaps between the parties' activities.

Competitive assessment

78. Whilst agreeing with the lack of horizontal overlaps in the parties' activities, one respondent of the market investigation indicated its view that the combination of the parties' portfolio of products used in the treatment of renal diseases might provide a competitive advantage in contracting and provide strong incentives for the merged entity to consider tying products and services marketed to healthcare professionals who are working in the renal space, in order to increase its market shares across a range of products. Based on the information submitted by the Notifying Party, however, it appears that the merged entity would have only one product in the EEA in its portfolio,

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[43] T2X9 is a broad category of "all other diagnostic tests" that includes both in vivo and in vitro tests that are not used in blood and urine diagnostics.

the phosphate binder product of Genzyme, the great majority of which would be used in the treatment of renal diseases. All other products have a wide range of other uses[44]. This appears to constrain significantly the ability and incentive for the combined entity to engage in potentially anti-competitive tying and/or bundling practices. Furthermore, neither customers of the respective products (hospitals) nor Key Opinion Leaders raised any similar concerns. Competition concerns on the basis of conglomerate effects can therefore be excluded.

4.7. Active Pharmaceutical Ingredients

79. There are no existing supply links between the parties for APIs.

80. Neither the Notifying Party nor Genzyme identified any APIs used in any of the other party's products where they would have over 25-30% market shares even on a narrower EEA-wide market definition. Competition concerns based on input foreclosure can therefore be excluded.

81. The Notifying Party does not believe they supply any APIs used in any of Genzyme's products at all. Furthermore, the Notifying Party does not believe Genzyme has over 5%[45] of the merchant market for any API for any finished dose pharmaceutical of which Sanofi-Aventis accounts for at least 25% of EEA-wide or global sales. Since the upstream market is at least EEA-wide, as already noted in previous decisions[46], even if the merged entity holds a large share of a given national pharmaceutical market, this share would represent only a small fraction of the total worldwide demand for the APIs concerned. Competition concerns based on customer foreclosure can therefore be excluded.

VI. CONCLUSION

82. For the above reasons, the European Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA

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44 According to estimates of the Notifying Party, for most of the products it supplies in the EEA that are likely to be also used to treat patients with renal disease, e.g. angiotensin agents, mineral and vitamin supplements etc., the renal use is only marginal (typically in the range of 1-2%). It is only in potassium binders where it cannot be excluded that renal patients may account for a significant part of the market (possibly even 50%). However, the Notifying Party submits that even potassium binders have a wide range of other uses, e.g. gastrointestinal disorders and cancer treatments as opposed to phosphate binders, a great majority of which are used in the treatment of renal diseases. Also, potassium binders are prescribed significantly by different specialists besides nephrologists (cardiologists, oncologists etc).

45 This filter for the upstream market has been previously applied in *Teva/Barr (op cit.) and Teva/Ratiopharm (op cit)* when identifying upstream vertically affected markets.

46 *Sanofi-Aventis/Zentiva op cit – recital 520 and Teva Barr op cit. recital 201*

Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation.

For the Commission
(Signed)

Joaquín ALMUNIA
Vice-President