Supporting Documentation for CMS-5528-IFC: Most Favored Nation (MFN) Model for Medicare Part B Drugs

Use of International Drug Pricing Information to Calculate Illustrative MFN Prices and MFN Drug Payment Amounts for the November 20, 2020 MFN Model Interim Final Rule with Comment Period (IFC)[1]

I. Overview

The November 20, 2020 MFN Model IFC implements a new Medicare payment model under section 1115A of the Social Security Act (the Act). The MFN Model will test whether more closely aligning payment for Medicare Part B drugs and biologicals (hereafter, referred to as "drugs") with international prices and removing incentives to use higher-cost drugs can control unsustainable growth in Medicare Part B spending without adversely affecting quality of care for beneficiaries.

In section III.E. of the IFC, the Centers for Medicare & Medicaid Services (CMS) describes the approach for selecting the drugs that will be included in the model (called MFN Model drugs) and for calculating an alternative payment for MFN Model drugs (called the MFN Drug Payment Amount), which will be based on an MFN Price. CMS presents illustrative MFN Prices and MFN Drug Payment Amounts for the MFN Model drugs for performance year 1, in Table 6 in the IFC (and shown in Appendix A of this document). This supporting documentation provides technical detail about how CMS[2] calculated the illustrative MFN Prices and MFN Drug Payment Amounts, using historical international drug pricing information available through IQVIA™; estimates of Gross Domestic Product (GDP) per capita adjusted for purchasing power, available in the CIA World Factbook[3]; and CMS data (further described in the Data Sources section below). We used available international sales and volume data from each calendar quarter in 2019 to calculate illustrative MFN Prices for that quarter. We applied the performance year 1 MFN Price phase-in formula (75 percent of the applicable Average Sales Price (ASP)[4] and 25 percent of the MFN Price) to calculate illustrative MFN Drug Payment Amounts, and applied the exception in § 513.210(d)(1)[5] when no international drug pricing information was available in the data source we used.

The Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE) purchases licenses to several data products maintained by IQVIA. CMS

[1] The MFN Model IFC is available at: https://www.federalregister.gov/documents/2020/11/27/2020-26037/most-favored-nation-mfn-model.

[2] CMS conducted this analysis with help from the Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE).

[3] The CIA World Factbook data are available at: https://www.cia.gov/library/publications/the-world-factbook/fields/211rank.html.

[4] Applicable ASP means the payment amount determined in accordance with section 1847A of the Act for a quarter minus the applicable add-on percentage.

[5] We refer readers to the IFC for a full discussion of the exception in § 513.210(d)(1). To summarize the exception, in cases where no international sales, volume or pricing information is available, the MFN Drug Payment Amount equals the applicable ASP.

obtained a data extract from IQVIA's MIDAS database, which is a potential data source for the MFN Model, from ASPE.

MIDAS uses a standardized method for identifying drugs within the United States and across countries, and a standard method for identifying drug forms that distinguishes among injectable, oral, and other forms of a drug. In addition, IQVIA maintains a process to limit the lag inherent in data to no more than 180 days from the end of the calendar quarter for which drug pricing information is compiled to the time that such updates are available to users of the database.

II. Data Sources Used for the Illustration of MFN Prices and MFN Drug Payment Amounts

Medicare Part B Claims Data Used to Identify the Performance Year 1 MFN Model Drugs

CMS used Medicare Part B drug claims data, with dates of service within calendar year 2019, extracted from the CMS Chronic Condition Warehouse. The extract was limited to final action claims where Medicare was the primary payer. After making the exclusions specified in § 513.130(b)[6], CMS identified the top 50 drugs (that is, the performance year 1 MFN Model drugs identified by HCPCS codes, hereafter called "identified HCPCS codes") based on 2019 Medicare allowed charges.

Healthcare Common Procedure Coding System (HCPCS) Data

The 2019 Alpha-Numeric HCPCS file and 2019 HCPCS Quarterly Update files were used to identify the HCPCS code long description, short description, applicable dosage forms (for example, injectable forms), and the amount of drug in one billing unit (for example, one milligram) for each of the identified HCPCS codes.[7]

Average Sales Price (ASP) Files

CMS used the quarterly ASP Drug Pricing Files[8] for 3Q2019, 4Q2019, 1Q2020, and 2Q2020. The payment limits in these files are based on sales that occurred two calendar quarters prior, as reported by manufacturers to CMS. Thus, we used the 3Q2019 ASP Drug Pricing File to identify the illustrative 1Q2019 applicable ASPs shown in Table 6 in the IFC (and shown in Appendix A of this document). Similarly, the 4Q2019, 1Q2020 and 2Q2020 ASP Drug Pricing Files were used to identify the illustrative applicable ASPs for 2Q2019, 3Q2019, and 4Q2019, respectively.

[6] The exclusions identify drugs and HCPCS codes that are excluded from the model.
[7] The 2019 Alpha-Numeric HCPCS files are available at: https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/Alpha-Numeric-HCPCS and https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/HCPCS-Quarterly-Update.html.
[8] The 2019 ASP files are available at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Part-B-Drugs/McrPartBDrugAvgSalesPrice/2019ASPFiles. The 2020 ASP files are available at: https://www.cms.gov/medicare/medicare-part-b-drug-average-sales-price/2020-asp-drug-pricing-files.

MIDAS®

MIDAS is IQVIA's international drug sales and volume database, which contains sales and volume information for more than 50 countries through the second quarter of 2020 (at the time we conducted this analysis), from as early as 2013.[9]

MIDAS data contain estimates of drug sales (called "Monetary Value" within the MIDAS dataset) and volume (called "Quantity" within the MIDAS dataset) that are based on audits of drug transactions in different countries and distribution channels (for example, retail pharmacies and hospitals). The audits underlying the MIDAS data collect sales and volume information at the ex-manufacturer (that is, prices as drugs are sold by manufacturers), ex-wholesaler, and/or retail levels. IQVIA applies a set of country- and channel-specific assumptions on markups between manufacturer, wholesale, and retail prices to estimate ex-manufacturer and retail sales for all drugs. Sales information within the database is stated in local and U.S. currency, as of the transaction date or current date, and are expressed as ex-manufacturer, trade, and public (retail) sales.[10] MIDAS uses a variable called "Molecule List" (also called "Moleculelist") which identifies scientific and nonproprietary names for drug and biological products. Users extract data from the MIDAS database by selecting report filters, which are values for various data fields included in the database, such as "Molecule List" and "NFC123" (or "New Form Code," a 3-digit code which identifies the dosage form[11]).

The query used to create the data extract used in this work is provided in Appendix C of this document. The values for the data field "Molecule List" were limited to the standardized naming that CMS mapped to the identified HCPCS codes; this mapping is provided in Appendix B of this document. Overall, there were 49 "Molecule List" entries for the 50 identified HCPCS codes because two HCPCS codes were mapped to pegfilgrastim: J2505 (Injection, pegfilgrastim 6mg) and Q5111 (Injection, udenyca (pegfilgrastim-cbqv) 0.5 mg).

The data field "Country" in the extract was limited to the U.S. and the non-U.S. member countries of the Organisation for Economic Co-operation and Development (OECD) with a GDP per capita (adjusted for purchasing power) that is at least 60 percent of the U.S. GDP per capita (in accordance with§ 513.140(b)), that were included in the database. Of note, international pricing information for three OECD countries meeting the GDP per capita threshold (Denmark, Iceland, and Israel) was not available for extract. Only data for non-U.S. countries was used for the illustration of MFN Prices for this analysis.

The query limited the dosage form data field "NFC123" to NFC level 1 codes of F (parenteral), G (parenteral long acting), and N (ophthalmic) because the included HCPCS codes represent drugs that are administered by injection or infusion.

---

[9] More recent data may have been added since the time we performed our work.

[10] Ex-manufacturer sales are: Manufacturer Selling Price or Wholesaler Purchasing Price or Price to Wholesaler (PTW). Trade sales are: Wholesaler Selling Price or Pharmacy Purchase Price or Price to Chemist (PTC). Public (retail) sales are: Pharmacy Selling Price or Consumer Purchase Price or Price to the Public (PTP).

[11] For more information on the New Form Codes see: https://www.ephmra.org/classification/new-form-codes/.

The data field "Quarter" was limited to 1Q2019 through 1Q2020 for this query; however, only data for calendar quarters in 2019 were used for the illustration of MFN Prices for this analysis.

The MIDAS extract file resulting from the query consisted of quarterly sales and volume information, including sales measured at the ex-manufacturer level in U.S. dollars converted at quarterly exchange rates and volume measured in terms of "standard units,"[12] for each country ("Country"), sector (hospital or retail), corporation, manufacturer, a standardized international generic product name, a standardized international brand name, prescription versus over-the-counter status, standardized active ingredient naming ("Molecule List"), dosage form ("NFC123"), dosage strength, pack size and volume, brand versus generic status, and biosimilar status. Within this document, we refer to different combinations of these variables at this level as a "MIDAS observation."

For more information about MIDAS see:
https://www.iqvia.com/solutions/commercialization/geographies/midas.

Central Intelligence Agency (CIA) World Factbook

CMS used data from the CIA World Factbook to identify purchasing power parity-adjusted per capita GDP estimates for each OECD member country. GDP (adjusted for purchasing power parity) compares the GDP or value of all final goods and services produced within a nation in a given year. A nation's GDP at purchasing power parity (PPP) exchange rate is the sum value of all goods and services produced in the country valued at prices prevailing in the United States. Estimated GDP adjusted for purchasing power parity is divided by estimated population to produce the estimate of GDP per capita (adjusted for purchasing power parity) that is used, as described below, to adjust the prices observed in the IQVIA MIDAS data for countries with GDP per capita (adjusted for purchasing power parity) below that of the United States.

For more information about the CIA World Factbook see:
https://www.cia.gov/library/publications/resources/the-world-factbook/fields/211rank.html

III. Calculation of Illustrative MFN Prices and MFN Drug Payment Amounts

For each identified HCPCS code and quarter shown in Table 6 in the IFC (and shown in Appendix A of this document), CMS used the following steps to calculate the illustrative MFN Prices and MFN Drug Payment Amounts. For each step, we provide a description of how we used the data sources noted in section II. above to perform that step.

- Identify the available international drug pricing information for the MFN Model drug.

  The IQVIA MIDAS database is the only data source with international drug sales and volume data that was identified and available to CMS for this analysis. We examined the MIDAS data extract (described in section II of this document). The HCPCS code Q2043

[12] In the MIDAS database, a standard unit is defined at the NFC123 level. For the F, G, and N codes used in this analysis, standard units refer to the number of vials, ampules, syringes, auto-injectors, pens, cartridges, or similar type of container used for an injectable product.

(Sipuleucel-t auto cd54+) was mapped to the MIDAS "Molecule List" sipuleucel-t and there was no available international (non-U.S.) data in the MIDAS extract for 2019. The HCPCS code J2507 (Pegloticase injection) was mapped to the MIDAS "Molecule List" value of pegloticase and there was no available international (non-U.S.) data in the MIDAS extract for 2019.

In accordance with § 513.210(b)(1)(i), using the "NFC123" data field, we identified and retained information only for dosage formulations that could be described by the MFN Model drug's HCPCS code descriptor. Specifically, we (1) removed MIDAS observations where the NFC level 1 code was N (ophthalmic) formulations except for aflibercept and ranibizumab (because the identified HCPCS codes for these drugs represent drug products that are used for injections into the eye), and (2) removed formulations where the NFC level 1 code was F or G for aflibercept because these formulations are not related to injection into the eye (ranibizumab did not have such formulations). Similarly, we removed MIDAS observations where the NFC level 1 code was F for octreotide because J2353 (Octreotide injection, depot) represents the long acting form, which aligns with drug products with a NFC level 1 code of G. We aligned MIDAS observations for rituximab with an NFC code of FPE ("S.C. Vials") with J9311 (Inj rituximab, hyaluronidase) because these products are formulated for subcutaneous injection and contain hyaluronidase per manufacturer labeling.

The following steps were performed for each identified HCPCS code, using the MIDAS observations with the "Molecule List" value that was mapped to that HCPCS code for each quarter in 2019 where data were included in the extract.

- Remove incomplete and low sales and volume data, as applicable.

  Additionally, in accordance with § 513.210(b)(1)(i), we excluded all MIDAS observations for formulations without information on strength (for example, values of "NA INTSTR", "COMBI STR", "VARI STR", or a percentage (e.g., 0.15%) in the "Int-Strength" data field) because volumes for these MIDAS observations could not be converted into volume measured in terms of HCPCS billing units. Two percent of the MIDAS observations were excluded for this reason; these MIDAS observations represented approximately 1 percent of sales and volume measured in standard units in the MIDAS extract for 2019.

  In accordance with § 513.210(b)(1)(ii), we excluded MIDAS observations where for a particular quarter both sales and volume data were not present. For each quarter, the excluded MIDAS observations accounted for less than a thousandth of one percent of total sales (when volume was not reported) and volume (when sales was not reported) in our extract. We also excluded MIDAS observations where for a particular quarter sales were less than $1,000 or MIDAS "standard units" were less than 1,000. The volume and sales-based exclusions accounted for approximately 3 percent of total sales and 2 percent of total volume in the MIDAS extract for 2019 quarters.

- Convert extracted volume data to the HCPCS code unit level and adjust for volume issues such as intentional overfill, as applicable.

  For each MIDAS observation, we performed the following steps using the fields of "Int-Strength," and "Int-Pack Volume" from the MIDAS data extract and the fields of "HCPCS Code," "Short Description," and "HCPCS Code Dosage" from the 2019 HCPCS files. These steps convert the extracted volume data in the MIDAS observations to be on the same basis as the HCPCS code billing unit (also called "HCPCS code dosage"). At this point, within the remaining MIDAS data extract, each combination of "Molecule List," "Int-Strength," and "Int-Pack Volume" formed a unique MIDAS observation with associated sales volume (in "Standard Units") and dollars (total U.S. dollars at quarterly exchange rates for all "Standard Units" in that MIDAS observation).

  1. The "Int-Strength" and "Int-Pack Volume" data fields were combined to calculate a total quantity (that is, the total amount of active ingredient or biological product for the unique observation), which we labeled as a "Dose Equivalent." This value represents the total quantity of the active ingredient or biological product included in each "Standard Unit."

     For example, MoleculeX has an "Int-Strength" of 50G/1ML and an "Int-Pack Volume" of 25ML. The total quantity (or "Dose Equivalent") for this unique observation will be 50G/1ML * 25ML = 1,250G.

     Where "Int-Pack Volume" was equal to "NA VOL" or other non-volume quantities (e.g., grams), the "Int-Pack Volume" was assumed to be 1. These products appear to be powdered forms where volume is not applicable to this step and the "Int-Strength" indicates the total quantity of the "Molecule List" included in each "Standard Unit."

     Similarly, for MIDAS observations where "Int-Pack Volume" was a unit of mass, rather than volume, the "Dose Equivalent" was set to 0 and the MIDAS observations were eliminated from the following steps, to further align with § 513.210(b)(1)(i).

     Note: For aflibercept, in accordance with § 513.210(b)(1)(iv), the HCPCS code billing units for each MIDAS observation was determined to be 2 because the labeling for these products indicate that each vial, regardless of the labeled volume, has one 2 mg dose and the HCPCS code billing unit is 1 mg.

  2. The unit for the "Dose Equivalent" was adjusted to match the unit associated with the "HCPCS Code Dosage" field, if necessary, by multiplying the "Dose Equivalent" by the relevant conversion factor from the following table:

MIDAS Unit	HCPCS Unit	Conversion Key	Multiplier
K	UNITS	K-UNITS	1,000
MG	MG	MG-MG	1
Y	MG	Y-MG	0.001

MIDAS Unit	HCPCS Unit	Conversion Key	Multiplier
Y	MCG	Y-MCG	1
IU	UNIT	IU-UNIT	1
K	IU	K-IU	1,000
IU	IU	IU-IU	1
G	MG	G-MG	1,000
IU	UNITS	IU-UNITS	1
IU	MG	IU-MG	1
MG	UNIT	MG-UNIT	1
K	MG	K-MG	1,000
IU	MG	IU-MG	1

For example, the "Dose Equivalent" (using the MIDAS observation data) is in G (grams) and the "HCPCS Code Dosage" (for the HCPCS billing unit) is in MG (milligrams). Using the above table, G to MG (or G-MG in the "Conversion Key" column) has a multiplier of 1,000. In the MoleculeX example above, the "Dose Equivalent" of 1,250G would be multiplied by 1,000 (G-MG conversion) to result in a volume of 1,250,000MG for the observation.

3. The adjusted volume data was further adjusted to be on the same dosage basis as the "HCPCS Code Dosage." This was done by dividing the adjusted "Dose Equivalent" by the "HCPCS Code Dosage."

   For example, with MoleculeX, the 1,250,000MG "Dose Equivalent" is divided by the "HCPCS Code Dosage" for MoleculeX, which is 500MG, such that 1,250,000MG "Dose Equivalent" / 500MG "HCPCS Code Dosage" = 2,500 "HCPCS Billing Units." In other words, the volume data contained in this MoleculeX unique observation is equivalent to 2,500 "HCPCS Billing Units."

- Calculate the unadjusted country-level price (representing the average price per unit of drug where the unit of drug is the same as the HCPCS code billing unit) for the MFN Model drug for each included country with available data.

  For this step, in accordance with § 513.210(b)(2), CMS aggregated sales in U.S. dollars and volume measured in HCPCS billing units by country and calendar quarter. We then divided aggregated quarterly sales by aggregated quarterly volume to calculate an average quarterly unadjusted country-level price per HCPCS billing unit in each country.

- Calculate the GDP adjuster for each included country.

  In accordance with § 513.210(b)(3), using the estimated 2017 GDP data obtained from the CIA World Factbook, CMS calculated the GDP adjuster for each non-U.S. OECD member country with a GDP that is at least 60 percent of U.S. GDP per capita by

dividing the country's GDP per-capita (adjusted for purchasing power) by the U.S. GDP per-capita. In cases where the resulting ratio exceeded 1.0, the GDP adjuster was set to 1.0. The resulting GDP adjusters are shown in Table 4 in the IFC.

- Apply the GDP adjuster to the unadjusted country-level price.

  In accordance with § 513.210(b)(4), for each non-U.S. OECD member country included in the extract, CMS multiplied the unadjusted country level-price for each calendar quarter by the applicable GDP adjuster to obtain the GDP-adjusted country level price.

- Select the lowest GDP-adjusted country-level price for each MFN Model drug.

  In accordance with § 513.210(b)(5), for each calendar quarter, CMS identified the lowest GDP-adjusted country level price. These prices are the MFN Prices shown by quarter in Table 6 in the IFC (and shown in Appendix A of this document).

- Identify the applicable ASP (the payment amount determined in accordance with 1847A of the Act less the applicable add-on percentage, for the MFN Model drug's HCPCS code).

  In accordance with § 513.210(b)(6), the applicable ASP was identified using the quarterly ASP Pricing File that was based on sales from the same calendar quarter as the MIDAS data. For example, the 3Q2019 ASP Pricing File is based on manufacturer ASPs for 1Q2019, therefore we used the 3Q2019 ASP Drug Pricing File data to calculate the applicable ASP that aligns with sales that occurred in 1Q2019 and the 1Q2019 MIDAS data. To calculate the applicable ASP, CMS identified the payment limit for the MFN Model drug's HCPCS code on the quarterly ASP Pricing Files and divided the payment limit by 1.06, except for Q5111 (Injection, udenyca 0.5 mg). For Q5111 (Injection, udenyca 0.5 mg), 6 percent of the payment limit for the reference biological product was subtracted.

- Compare the MFN Price to the applicable ASP (to apply limit, if applicable).

  In accordance with § 513.210(b)(7), for each calendar quarter, we compared the MFN Price to the applicable ASP. The MFN Price, when available, was lower than the applicable ASP in each comparison.

- Identify the applicable phase-in formula and adjustments.

  For the illustration, we identified the phase-in formula for performance year 1, in accordance with § 513.210(b)(8)(i), that is: 75 percent applicable ASP and 25 percent MFN Price. Adjustments to the phase-in formula, as discussed in section III.E.9. of the IFC, were not applicable for the illustration.

- Apply the applicable phase-in formula and adjustments, if applicable, to calculate the MFN Drug Payment Amount.

  In accordance with § 513.210(b)(9), we applied the performance year 1 phase-in formula using 75 percent applicable ASP and 25 percent MFN Price for each calendar quarter to

calculate the illustrative MFN Drug Payment Amounts, except where international pricing information was not available in the MIDAS extract. This exception applied to two of the HCPCS codes, Q2043 (Sipuleucel-t auto cd54+) and J2507 (Pegloticase injection). In such cases, the illustrative MFN Drug Payment Amount is the applicable ASP, in accordance with § 513.210(d)(1).

Appendix A – November 20, 2020 Most Favored Nation Model IFC

TABLE 6. ILLUSTRATIVE MFN DRUG PAYMENT AMOUNTS PER BILLING UNIT

HCPCS Code†	Short Description	HCPCS Code Dosage	2019 Quarter	Illustrative Applicable ASP*	Illustrative MFN Price **	Illustrative MFN Drug Payment Amount***	Illustrative MFN Country††
J0129	Abatacept injection	10 MG	Q1	$ 50.891	$ 12.977	$ 41.412	Australia
			Q2	$ 51.243	$ 12.821	$ 41.638	Australia
			Q3	$ 51.744	$ 12.862	$ 42.024	Australia
			Q4	$ 51.965	$ 12.883	$ 42.195	Australia
J0178****	Aflibercept injection	1 MG	Q1	$ 903.173	$ 399.359	$ 777.219	Norway
			Q2	$ 898.559	$ 396.237	$ 772.979	Norway
			Q3	$ 891.537	$ 386.957	$ 765.392	Norway
			Q4	$ 885.324	$ 376.125	$ 758.024	Norway
J0517	Inj., benralizumab, 1 mg	1 MG	Q1	$ 159.283	$ 102.884	$ 145.183	Germany
			Q2	$ 158.964	$ 91.677	$ 142.142	Germany
			Q3	$ 160.841	$ 88.523	$ 142.761	Australia
			Q4	$ 160.470	$ 88.221	$ 142.408	Australia
J0585	Injection, onabotulinum-toxina	1 UNIT	Q1	$ 5.777	$ 1.112	$ 4.611	United Kingdom
			Q2	$ 5.776	$ 0.466	$ 4.449	Ireland
			Q3	$ 5.775	$ 0.461	$ 4.447	Ireland
			Q4	$ 5.764	$ 0.459	$ 4.438	Ireland
J0717	Certolizumab pegol inj 1mg	1 MG	Q1	$ 7.672	$ 1.917	$ 6.233	Australia
			Q2	$ 7.569	$ 1.884	$ 6.148	Australia
			Q3	$ 7.742	$ 1.845	$ 6.268	Australia
			Q4	$ 7.535	$ 1.839	$ 6.111	Australia
J0881	Darbepoetin alfa, non-esrd	1 MCG	Q1	$ 3.610	$ 0.825	$ 2.914	Republic of Korea
			Q2	$ 3.634	$ 0.635	$ 2.884	Republic of Korea
			Q3	$ 3.604	$ 0.618	$ 2.857	Republic of Korea
			Q4	$ 3.462	$ 0.627	$ 2.753	Republic of Korea
J0885	Epoetin alfa, non-esrd	1000 UNITS	Q1	$ 10.813	$ 3.093	$ 8.883	Republic of Korea
			Q2	$ 10.407	$ 2.931	$ 8.538	Republic of Korea
			Q3	$ 9.966	$ 2.880	$ 8.194	Republic of Korea
			Q4	$ 9.451	$ 2.936	$ 7.822	Republic of Korea
J0897	Denosumab injection	1 MG	Q1	$ 18.023	$ 2.963	$ 14.258	Norway
			Q2	$ 18.185	$ 2.940	$ 14.374	Luxembourg
			Q3	$ 18.187	$ 2.873	$ 14.358	Norway
			Q4	$ 18.243	$ 2.794	$ 14.381	Norway

HCPCS Code†	Short Description	HCPCS Code Dosage	2019 Quarter	Illustrative Applicable ASP*	Illustrative MFN Price **	Illustrative MFN Drug Payment Amount***	Illustrative MFN Country††
J1300	Eculizumab injection	10 MG	Q1	$ 217.433	$ 161.474	$ 203.443	United Kingdom
			Q2	$ 217.433	$ 159.473	$ 202.943	United Kingdom
			Q3	$ 217.433	$ 152.863	$ 201.291	United Kingdom
			Q4	$ 217.433	$ 159.631	$ 202.982	United Kingdom
J1439	Inj ferric carboxymaltos 1mg	1 MG	Q1	$ 1.029	$ 0.015	$ 0.776	Japan
			Q2	$ 1.035	$ 0.015	$ 0.780	Japan
			Q3	$ 1.042	$ 0.015	$ 0.786	Japan
			Q4	$ 1.033	$ 0.015	$ 0.779	Japan
J1602	Golimumab for iv use 1mg	1 MG	Q1	$ 20.819	$ 14.783	$ 19.310	Republic of Korea
			Q2	$ 20.358	$ 14.446	$ 18.880	Republic of Korea
			Q3	$ 19.490	$ 13.840	$ 18.077	Republic of Korea
			Q4	$ 19.030	$ 14.138	$ 17.807	Republic of Korea
J1745	Infliximab not biosimil 10mg	10 MG	Q1	$ 61.201	$ 27.427	$ 52.757	Austria
			Q2	$ 59.703	$ 26.741	$ 51.462	Australia
			Q3	$ 54.100	$ 25.685	$ 46.996	Austria
			Q4	$ 52.543	$ 22.508	$ 45.034	Australia
J1930	Lanreotide injection	1 MG	Q1	$ 59.634	$ 9.744	$ 47.161	Norway
			Q2	$ 58.796	$ 9.667	$ 46.514	Norway
			Q3	$ 60.051	$ 9.441	$ 47.398	Norway
			Q4	$ 62.125	$ 9.177	$ 48.888	Norway
J2182	Injection, mepolizumab, 1mg	1 MG	Q1	$ 28.343	$ 11.774	$ 24.201	Sweden
			Q2	$ 28.038	$ 11.424	$ 23.884	Sweden
			Q3	$ 27.631	$ 11.258	$ 23.538	Sweden
			Q4	$ 27.136	$ 10.841	$ 23.062	Norway
J2323	Natalizumab injection	1 MG	Q1	$ 19.143	$ 4.174	$ 15.401	Australia
			Q2	$ 19.096	$ 3.744	$ 15.258	Australia
			Q3	$ 19.719	$ 3.627	$ 15.696	Australia
			Q4	$ 19.701	$ 3.603	$ 15.676	Australia
J2350	Injection, ocrelizumab, 1 mg	1 MG	Q1	$ 54.167	$ 18.789	$ 45.323	Switzerland
			Q2	$ 54.167	$ 17.698	$ 45.050	Switzerland
			Q3	$ 54.167	$ 18.005	$ 45.126	Switzerland
			Q4	$ 54.167	$ 17.932	$ 45.108	Switzerland
J2353*****	Octreotide injection, depot	1 MG	Q1	$ 193.102	$ 27.519	$ 151.706	Spain
			Q2	$ 194.873	$ 27.217	$ 152.959	Spain
			Q3	$ 194.420	$ 26.939	$ 152.550	Spain
			Q4	$ 194.411	$ 25.376	$ 152.153	Spain
J2357	Omalizumab injection	5 MG	Q1	$ 34.955	$ 10.367	$ 28.808	Norway
			Q2	$ 34.696	$ 10.281	$ 28.592	Norway
			Q3	$ 35.242	$ 10.045	$ 28.943	Norway
			Q4	$ 35.044	$ 9.764	$ 28.724	Norway

HCPCS Code†	Short Description	HCPCS Code Dosage	2019 Quarter	Illustrative Applicable ASP*	Illustrative MFN Price **	Illustrative MFN Drug Payment Amount***	Illustrative MFN Country††
J2505	Injection, pegfilgrastim 6mg	6 MG	Q1	$ 4,270.573	$ 780.548	$ 3,398.067	Germany
			Q2	$ 4,178.892	$ 661.054	$ 3,299.433	Austria
			Q3	$ 4,010.890	$ 566.107	$ 3,149.694	Australia
			Q4	$ 3,757.680	$ 493.426	$ 2,941.617	Australia
J2507	Pegloticase injection	1 MG	Q1	$ 2,344.568	N/A	$ 2,344.568	
			Q2	$ 2,370.328	N/A	$ 2,370.328	
			Q3	$ 2,473.369	N/A	$ 2,473.369	
			Q4	$ 2,444.249	N/A	$ 2,444.249	
J2778	Ranibizumab injection	0.1 MG	Q1	$ 337.116	$ 31.070	$ 260.604	Republic of Korea
			Q2	$ 332.240	$ 29.975	$ 256.673	Republic of Korea
			Q3	$ 327.618	$ 31.920	$ 253.694	Republic of Korea
			Q4	$ 323.876	$ 33.620	$ 251.312	Republic of Korea
J2785	Regadenoson injection	0.1 MG	Q1	$ 55.915	$ 19.846	$ 46.898	United Kingdom
			Q2	$ 55.870	$ 19.505	$ 46.779	Sweden
			Q3	$ 55.923	$ 18.788	$ 46.639	United Kingdom
			Q4	$ 56.011	$ 19.161	$ 46.799	Sweden
J2796	Romiplostim injection	10 MCG	Q1	$ 69.344	$ 28.025	$ 59.015	Japan
			Q2	$ 70.071	$ 18.245	$ 57.114	Australia
			Q3	$ 70.057	$ 17.824	$ 56.998	Australia
			Q4	$ 70.433	$ 17.840	$ 57.285	Australia
J3262	Tocilizumab injection	1 MG	Q1	$ 4.654	$ 0.878	$ 3.710	Australia
			Q2	$ 4.677	$ 0.863	$ 3.724	Australia
			Q3	$ 4.792	$ 0.860	$ 3.809	Australia
			Q4	$ 4.797	$ 0.866	$ 3.814	Australia
J3357	Ustekinumab sub cu inj, 1 mg	1 MG	Q1	$ 179.912	$ 40.633	$ 145.093	France
			Q2	$ 180.554	$ 39.529	$ 145.297	France
			Q3	$ 179.582	$ 38.768	$ 144.379	France
			Q4	$ 175.250	$ 37.857	$ 140.902	France
J3380	Injection, vedolizumab	1 MG	Q1	$ 18.992	$ 6.871	$ 15.961	France
			Q2	$ 18.740	$ 6.795	$ 15.753	France
			Q3	$ 19.096	$ 5.275	$ 15.641	Republic of Korea
			Q4	$ 19.024	$ 5.357	$ 15.607	Republic of Korea
J7324	Orthovisc inj per dose	PER DOSE	Q1	$ 138.594	$ 11.495	$ 106.819	Japan
			Q2	$ 135.280	$ 11.355	$ 104.299	Japan
			Q3	$ 132.474	$ 11.674	$ 102.274	Japan
			Q4	$ 127.383	$ 11.497	$ 98.411	Japan

HCPCS Code†	Short Description	HCPCS Code Dosage	2019 Quarter	Illustrative Applicable ASP*	Illustrative MFN Price **	Illustrative MFN Drug Payment Amount***	Illustrative MFN Country††
J9022	Inj, atezolizumab, 10 mg	10 MG	Q1	$ 72.809	$ 42.141	$ 65.142	Germany
			Q2	$ 72.649	$ 41.019	$ 64.742	Germany
			Q3	$ 73.450	$ 20.395	$ 60.186	Republic of Korea
			Q4	$ 73.022	$ 20.715	$ 59.945	Republic of Korea
J9034	Inj., bendeka 1 mg	1 MG	Q1	$ 22.454	$ 0.473	$ 16.959	Germany
			Q2	$ 21.556	$ 0.469	$ 16.284	Germany
			Q3	$ 20.495	$ 0.466	$ 15.488	Germany
			Q4	$ 19.980	$ 0.461	$ 15.100	Germany
J9035	Bevacizumab injection	10 MG	Q1	$ 76.681	$ 29.541	$ 64.896	Norway
			Q2	$ 76.587	$ 29.291	$ 64.763	Norway
			Q3	$ 76.078	$ 28.607	$ 64.210	Norway
			Q4	$ 75.052	$ 27.444	$ 63.150	Australia
J9041	Inj., velcade 0.1 mg	0.1 MG	Q1	$ 42.008	$ 14.837	$ 35.215	Canada
			Q2	$ 42.158	$ 13.011	$ 34.871	Canada
			Q3	$ 42.316	$ 10.029	$ 34.244	Canada
			Q4	$ 42.498	$ 8.070	$ 33.891	Canada
J9042	Brentuximab vedotin inj	1 MG	Q1	$ 153.836	$ 76.887	$ 134.599	United Kingdom
			Q2	$ 153.242	$ 75.908	$ 133.909	United Kingdom
			Q3	$ 159.787	$ 72.729	$ 138.022	United Kingdom
			Q4	$ 159.336	$ 76.009	$ 138.504	United Kingdom
J9047	Injection, carfilzomib, 1 mg	1 MG	Q1	$ 35.140	$ 17.144	$ 30.641	Switzerland
			Q2	$ 35.471	$ 17.036	$ 30.862	Switzerland
			Q3	$ 35.415	$ 17.332	$ 30.894	Switzerland
			Q4	$ 35.452	$ 17.261	$ 30.904	Switzerland
J9055	Cetuximab injection	10 MG	Q1	$ 58.596	$ 21.422	$ 49.303	Belgium
			Q2	$ 58.536	$ 21.183	$ 49.198	Belgium
			Q3	$ 59.628	$ 20.964	$ 49.962	Belgium
			Q4	$ 59.388	$ 20.874	$ 49.759	Belgium
J9145	Injection, daratumumab 10 mg	10 MG	Q1	$ 50.708	$ 47.053	$ 49.795	Japan
			Q2	$ 50.894	$ 42.527	$ 48.803	Republic of Korea
			Q3	$ 50.972	$ 41.538	$ 48.613	Republic of Korea
			Q4	$ 51.080	$ 42.189	$ 48.858	Republic of Korea
J9173	Inj., durvalumab, 10 mg	10 MG	Q1	$ 70.619	$ 61.519	$ 68.344	Germany
			Q2	$ 70.411	$ 60.844	$ 68.020	Germany
			Q3	$ 71.302	$ 60.221	$ 68.532	Germany
			Q4	$ 71.221	$ 56.940	$ 67.651	Germany

HCPCS Code†	Short Description	HCPCS Code Dosage	2019 Quarter	Illustrative Applicable ASP*	Illustrative MFN Price **	Illustrative MFN Drug Payment Amount***	Illustrative MFN Country††
J9176	Injection, elotuzumab, 1mg	1 MG	Q1	$ 6.124	$ 3.888	$ 5.565	Germany
			Q2	$ 6.128	$ 3.895	$ 5.570	Germany
			Q3	$ 6.209	$ 3.859	$ 5.622	Germany
			Q4	$ 6.211	$ 3.789	$ 5.606	Germany
J9217	Leuprolide acetate suspnsion	7.5 MG	Q1	$ 216.526	$ 81.556	$ 182.784	Belgium
			Q2	$ 211.979	$ 78.666	$ 178.651	Belgium
			Q3	$ 217.051	$ 77.860	$ 182.253	Belgium
			Q4	$ 222.045	$ 103.103	$ 192.310	Spain
J9228	Ipilimumab injection	1 MG	Q1	$ 144.395	$ 80.859	$ 128.511	Germany
			Q2	$ 144.460	$ 80.302	$ 128.421	Germany
			Q3	$ 146.398	$ 78.540	$ 129.433	Germany
			Q4	$ 146.442	$ 75.848	$ 128.793	Germany
J9264	Paclitaxel protein bound	1 MG	Q1	$ 11.608	$ 0.127	$ 8.738	Australia
			Q2	$ 11.805	$ 0.123	$ 8.884	Australia
			Q3	$ 11.843	$ 0.127	$ 8.914	Australia
			Q4	$ 11.998	$ 0.129	$ 9.031	Australia
J9271	Inj pembro-lizumab	1 MG	Q1	$ 46.777	$ 23.308	$ 40.910	Switzerland
			Q2	$ 46.593	$ 23.162	$ 40.735	Switzerland
			Q3	$ 47.419	$ 23.563	$ 41.455	Switzerland
			Q4	$ 47.192	$ 23.468	$ 41.261	Switzerland
J9299	Injection, nivolumab	1 MG	Q1	$ 26.230	$ 8.321	$ 21.753	Japan
			Q2	$ 26.231	$ 7.438	$ 21.533	Japan
			Q3	$ 26.568	$ 7.415	$ 21.780	Japan
			Q4	$ 26.568	$ 7.393	$ 21.774	Japan
J9305	Pemetrexed injection	10 MG	Q1	$ 65.607	$ 1.920	$ 49.685	Canada
			Q2	$ 65.540	$ 1.882	$ 49.625	Canada
			Q3	$ 66.786	$ 0.623	$ 50.245	Australia
			Q4	$ 66.542	$ 0.611	$ 50.059	Australia
J9306	Injection, pertuzumab, 1 mg	1 MG	Q1	$ 11.557	$ 6.192	$ 10.216	Australia
			Q2	$ 11.594	$ 6.087	$ 10.217	Australia
			Q3	$ 11.903	$ 5.967	$ 10.419	Australia
			Q4	$ 11.921	$ 5.712	$ 10.368	Norway
J9311	Inj rituximab, hyaluronidase	10 MG	Q1	$ 41.810	$ 11.659	$ 34.273	Norway
			Q2	$ 41.064	$ 11.483	$ 33.669	Republic of Korea
			Q3	$ 40.442	$ 11.216	$ 33.136	Republic of Korea
			Q4	$ 40.032	$ 11.392	$ 32.872	Republic of Korea
J9312	Inj., rituximab, 10 mg	10 MG	Q1	$ 89.597	$ 22.642	$ 72.858	Norway
			Q2	$ 89.308	$ 22.446	$ 72.593	Republic of Korea
			Q3	$ 89.067	$ 21.935	$ 72.284	Norway
			Q4	$ 88.847	$ 15.631	$ 70.543	Australia
J9354	Inj, ado-trastuzumab emt 1mg	1 MG	Q1	$ 29.515	$ 18.764	$ 26.827	Canada
			Q2	$ 29.589	$ 18.790	$ 26.889	Canada
			Q3	$ 30.290	$ 19.050	$ 27.480	Canada
			Q4	$ 30.243	$ 19.034	$ 27.441	Canada

HCPCS Code†	Short Description	HCPCS Code Dosage	2019 Quarter	Illustrative Applicable ASP*	Illustrative MFN Price **	Illustrative MFN Drug Payment Amount***	Illustrative MFN Country††
J9355	Inj trastuzumab excl biosimi	10 MG	Q1	$ 100.920	$ 21.917	$ 81.169	Republic of Korea
			Q2	$ 100.587	$ 21.008	$ 80.692	Republic of Korea
			Q3	$ 99.863	$ 20.521	$ 80.028	Republic of Korea
			Q4	$ 98.301	$ 20.837	$ 78.935	Republic of Korea
Q2043	Sipuleucel-t auto cd54+	Per infusion (minimum 50 million cells)	Q1	$ 41,532.639	N/A	$ 41,532.639	
			Q2	$ 43,749.244	N/A	$ 43,749.244	
			Q3	$ 43,342.102	N/A	$ 43,342.102	
			Q4	$ 45,270.100	N/A	$ 45,270.100	
Q5111	Injection, udenyca 0.5 mg	0.5 MG	Q1	$ 337.854	$ 65.046	$ 269.652	Germany
			Q2	$ 326.162	$ 55.088	$ 258.393	Austria
			Q3	$ 316.466	$ 47.176	$ 249.143	Australia
			Q4	$ 303.061	$ 41.119	$ 237.575	Australia

N/A means not available; international drug pricing information was not available in the data source CMS used.
† HCPCS codes on the performance year 1 MFN Model Drug HCPCS Code List in Table 2 of the IFC, with short descriptions effective January 1, 2021.
††MFN Country means the country with the lowest GDP-adjusted country-level price.
*****Based on the calendar quarter in which manufacturer sales occurred; note, the calendar quarter shown is two calendar quarters prior to when the applicable ASP was used to calculate the payment amounts under the methodology in section 1847A of the Act. For example, the applicable ASPs for Q1 2019 shown in this table align with the payment amounts shown in the July 2019 ASP Pricing File available at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Part-B-Drugs/McrPartBDrugAvgSalesPrice/2019ASPFiles.
**Based on available international drug pricing sales and volume information for the calendar quarter for non-U.S. OECD countries with a GDP per capita (based on purchasing power parity) that is at least 60 percent of the U.S. GDP per capita in 2017.
*** The MFN Drug Payment Amount reflects the exception in § 513.210(d)(1) and equals the applicable ASP when the MFN Price is not available.
**** The MFN Price for J0178 (Aflibercept injection) is based on data for the ophthalmic formulation only.
***** The MFN Price for J2353 (Octreotide injection, depot) is based on data for long-acting formulations only.

Appendix B – Mapping of Performance Year 1 MFN Model Drugs by HCPCS Code to MIDAS "Molecules List" Values

HCPCS Code	Long Description	Short Description	Molecule List
J0129	Injection, abatacept, 10 mg (code may be used for medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Abatacept injection	ABATACEPT
J0178	Injection, aflibercept, 1 mg	Aflibercept injection	AFLIBERCEPT
J0517	Injection, benralizumab, 1 mg	Inj., benralizumab, 1 mg	BENRALIZUMAB
J0585	Injection, onabotulinumtoxina, 1 unit	Injection,onabotulinumtoxina	CLOSTRIDIUM BOTULINUM TOXIN TYPE A
J0717	Injection, certolizumab pegol, 1 mg (code may be used for medicare when drug administered under the direct supervision of a physician, not for use when drug is self-administered)	Certolizumab pegol inj 1mg	CERTOLIZUMAB PEGOL
J0881	Injection, darbepoetin alfa, 1 microgram (non-esrd use)	Darbepoetin alfa, non-esrd	DARBEPOETIN ALFA
J0885	Injection, epoetin alfa, (for non-esrd use), 1000 units	Epoetin alfa, non-esrd	EPOETIN ALFA
J0897	Injection, denosumab, 1 mg	Denosumab injection	DENOSUMAB
J1300	Injection, eculizumab, 10 mg	Eculizumab injection	ECULIZUMAB
J1439	Injection, ferric carboxymaltose, 1 mg	Inj ferric carboxymaltos 1mg	IRON FERRIC
J1602	Injection, golimumab, 1 mg, for intravenous use	Golimumab for iv use 1mg	GOLIMUMAB
J1745	Injection, infliximab, excludes biosimilar, 10 mg	Infliximab not biosimil 10mg	INFLIXIMAB
J1930	Injection, lanreotide, 1 mg	Lanreotide injection	LANREOTIDE
J2182	Injection, mepolizumab, 1 mg	Injection, mepolizumab, 1mg	MEPOLIZUMAB
J2323	Injection, natalizumab, 1 mg	Natalizumab injection	NATALIZUMAB

HCPCS Code	Long Description	Short Description	Molecule List
J2350	Injection, ocrelizumab, 1 mg	Injection, ocrelizumab, 1 mg	OCRELIZUMAB
J2353	Injection, octreotide, depot form for intramuscular injection, 1 mg	Octreotide injection, depot	OCTREOTIDE
J2357	Injection, omalizumab, 5 mg	Omalizumab injection	OMALIZUMAB
J2505	Injection, pegfilgrastim, 6 mg	Injection, pegfilgrastim 6mg	PEGFILGRASTIM
J2507	Injection, pegloticase, 1 mg	Pegloticase injection	PEGLOTICASE
J2778	Injection, ranibizumab, 0.1 mg	Ranibizumab injection	RANIBIZUMAB
J2785	Injection, regadenoson, 0.1 mg	Regadenoson injection	REGADENOSON
J2796	Injection, romiplostim, 10 micrograms	Romiplostim injection	ROMIPLOSTIM
J3262	Injection, tocilizumab, 1 mg	Tocilizumab injection	TOCILIZUMAB
J3357	Ustekinumab, for subcutaneous injection, 1 mg	Ustekinumab sub cu inj, 1 mg	USTEKINUMAB
J3380	Injection, vedolizumab, 1 mg	Injection, vedolizumab	VEDOLIZUMAB
J7324	Hyaluronan or derivative, orthovisc, for intra-articular injection, per dose	Orthovisc inj per dose	HYALURONIC ACID
J9022	Injection, atezolizumab, 10 mg	Inj, atezolizumab,10 mg	ATEZOLIZUMAB
J9034	Injection, bendamustine hcl (bendeka), 1 mg	Inj., bendeka 1 mg	BENDAMUSTINE
J9035	Injection, bevacizumab, 10 mg	Bevacizumab injection	BEVACIZUMAB
J9041	Injection, bortezomib (velcade), 0.1 mg	Inj., velcade 0.1 mg	BORTEZOMIB
J9042	Injection, brentuximab vedotin, 1 mg	Brentuximab vedotin inj	BRENTUXIMAB VEDOTIN
J9047	Injection, carfilzomib, 1 mg	Injection, carfilzomib, 1 mg	CARFILZOMIB
J9055	Injection, cetuximab, 10 mg	Cetuximab injection	CETUXIMAB
J9145	Injection, daratumumab, 10 mg	Injection, daratumumab 10 mg	DARATUMUMAB
J9173	Injection, durvalumab, 10 mg	Inj., durvalumab, 10 mg	DURVALUMAB

HCPCS Code	Long Description	Short Description	Molecule List
J9176	Injection, elotuzumab, 1 mg	Injection, elotuzumab, 1mg	ELOTUZUMAB
J9217	Leuprolide acetate (for depot suspension), 7.5 mg	Leuprolide acetate suspnsion	LEUPRORELIN
J9228	Injection, ipilimumab, 1 mg	Ipilimumab injection	IPILIMUMAB
J9264	Injection, paclitaxel protein-bound particles, 1 mg	Paclitaxel protein bound	PACLITAXEL
J9271	Injection, pembrolizumab, 1 mg	Inj pembrolizumab	PEMBROLIZUMAB
J9299	Injection, nivolumab, 1 mg	Injection, nivolumab	NIVOLUMAB
J9305	Injection, pemetrexed, not otherwise specified, 10 mg	Inj. pemetrexed nos 10mg	PEMETREXED
J9306	Injection, pertuzumab, 1 mg	Injection, pertuzumab, 1 mg	PERTUZUMAB
J9311	Injection, rituximab 10 mg and hyaluronidase	Inj rituximab, hyaluronidase	HYALURONIDASE!RITUXIMAB
J9312	Injection, rituximab, 10 mg	Inj., rituximab, 10 mg	RITUXIMAB
J9354	Injection, ado-trastuzumab emtansine, 1 mg	Inj, ado-trastuzumab emt 1mg	TRASTUZUMAB EMTANSINE
J9355	Injection, trastuzumab, excludes biosimilar, 10 mg	Inj trastuzumab excl biosimi	TRASTUZUMAB
Q2043	Sipuleucel-t, minimum of 50 million autologous cd54+ cells activated with pap-gm-csf, including leukapheresis and all other preparatory procedures, per infusion	Sipuleucel-t auto cd54+	SIPULEUCEL-T
Q5111	Injection, pegfilgrastim-cbqv, biosimilar, (udenyca), 0.5 mg	Injection, udenyca 0.5 mg	PEGFILGRASTIM

Appendix C – Query of MIDAS Quarterly Audit Used in Development of Illustrative MFN Prices and MFN Drug Payment Amounts

MIDAS Quarterly Audit from Q3/2017 to Q1/2020.
A. Includes all available columns.
Title Quarterly
Sub Title
Audit Quarterly
--- Report Filters ---
Country AUSTRALIA, AUSTRIA, BELGIUM, CANADA, FINLAND, FRANCE, GERMANY, IRELAND, ITALY, JAPAN, KOREA, LUXEMBOURG, NETHERLANDS, NEW ZEALAND, NORWAY, SPAIN, SWEDEN, SWITZERLAND, UK, US
Molecule List ABATACEPT, AFLIBERCEPT, ATEZOLIZUMAB, BENDAMUSTINE, BENRALIZUMAB, BEVACIZUMAB, BORTEZOMIB, BRENTUXIMAB VEDOTIN, CARFILZOMIB, CERTOLIZUMAB PEGOL, CETUXIMAB, CLOSTRIDIUM BOTULINUM TOXIN TYPE A, DARATUMUMAB, DARBEPOETIN ALFA, DENOSUMAB, DURVALUMAB, ECULIZUMAB, ELOTUZUMAB, EPOETIN ALFA, GOLIMUMAB, HYALURONIC ACID, HYALURONIDASE!RITUXIMAB, INFLIXIMAB, IPILIMUMAB, IRON FERRIC, LANREOTIDE, LEUPRORELIN, MEPOLIZUMAB, NATALIZUMAB, NIVOLUMAB, OCRELIZUMAB, OCTREOTIDE, OMALIZUMAB, PACLITAXEL, PEGFILGRASTIM, PEGLOTICASE, PEMBROLIZUMAB, PEMETREXED, PERTUZUMAB, RANIBIZUMAB, REGADENOSON, RITUXIMAB, ROMIPLOSTIM, SIPULEUCEL-T, TOCILIZUMAB, TRASTUZUMAB, TRASTUZUMAB EMTANSINE, USTEKINUMAB, VEDOLIZUMAB
NFC123 FMA AMPOULES INJ., FMB DRY AMPS.INJ, FMC AMPOULES I.V., FMD AMPOULES I.M., FME AMPOULES S.C., FMY AMPS OTHERS, FMZ C-PACK AMPS, FNA PRE-FILL SYRNG, FNB PF SYR DRY ORD, FNC P-F SYRNG I.V., FND PRE-FILL I.M, FNE P-F SYRNG SC, FNF P-F SYRNG I D, FNH PREFIL AUTOINJ, FNY OTH P-FILL SYR, FNZ CMB-PK P-F SYR, FPA VIAL, FPB VIAL DRY, FPC VIAL IV, FPD VIAL IM, FPE VIAL SC, FPY VIAL OTHER, FPZ C-PCK VIAL, FQA INFUS.AMPOULES, FQB INFUS.DRY AMPS, FQC INFUS.VIA/BOT., FQD INF DRY BOTTLE, FQE INFUSION BAGS, FQF INF CARTRIDGES, FQY OTH. INFUSIONS, FRA CARTRIDGES, FRB DRY CARTRIDGE, FRF P-F PENS, FRG DRY P-F PENS, FRP U-D CARTRIDGE, GMA AMPOULES RET, GMB DRY AMPS.RET., GMD AMPS I.M.RET, GME AMPS S.C.RET, GMY OTH AMPS RET, GNA PRE-FIL SYR RT, GNB PF SYR DRY RET, GND P-F SYR IM RT, GNE P-F SYR SC RET, GNH PF AUTOINJ RET, GNY OTH P-F SYR RT, GPA VIAL RET, GPB VIAL DRY RET, GPD VIAL IM RET, GPE VIAL SC RET, GPY VIAL OTHER RET, GRA CARTRIDGES RET, GRF P-F PENS RET, GRG DRY P-F PEN RT, GYV IMPLANTS, NMA OPHTH AMPOULES, NMB OPHTH DRY AMPS, NNA P-FIL SYR OPHT, NPA OPHTHAL VIALS, NPB OPHT DRY VIALS
Calendar Quarter Q1 2020, Q4 2019, Q3 2019, Q2 2019, Q1 2019

Date Extracted: September 14, 2020