OVERPATENTED, OVERPRICED

Curbing patent abuse:
Tackling the root of the drug pricing crisis

Patent Search Methodology

September 2022

Patent Methodology Overview

The top ten selling drugs for the database were selected based on drugs (excluding COVID-10 vaccines) with the highest U.S. net sales revenue in 2021, as reported by manufacturers in the U.S. Securities and Exchange Commission (SEC) filings or earnings reports.

Comprehensive patent landscaping on these drugs were conducted between May and June 2022 to identify granted patents (currently active and expired) and patent applications (currently pending and abandoned) at the United States Patent and Trademark Office (USPTO) for the ten top selling drugs. For all drugs, we identified patents and their patent family members that could either be used to deter other branded competitors from upstream research and development of competing similar products (e.g., "me-too" versions of a small molecule drug, biologics that bind to the same molecular target) or which could be used downstream to block/delay generic and biosimilar entrants. Irrespective of whether a patent in a patent family was a continuation, continuation-in-part, or divisional application, and linked by a terminal disclaimer in terms of its expiry date, it was counted as a distinct patent. This is because each patent is a distinct right and could be asserted as such in any litigation.

Importantly, we included patents on products through their entire development and licensing history, which often included multiple corporate acquisitions, co-development, sub-licensing deals, and litigation. Each individual patent and the main patent claims were then analyzed and coded in terms of their patent type (e.g., method of treatment, formulation, etc.), scope of protection of the subject matter covered, and to identify the primary patents on each drug based on the subject matter covered. We cross checked the primary patent data and/or expiry dates identified with patents listed in the Orange Book/Purple Book and those asserted in litigation (where applicable), statements made by companies in their SEC filings or in press releases, as well as journal articles that provided analysis of the drugs and related patent information to determine the expiry date for the primary patents on each drug.

The methodology and resources used to build the patent landscape for each drug included the following steps: (1) identifying patents listed on the U.S. Food and Drug Administration (USFDA) Orange Book (small molecule drugs) and the Purple Book (biologic drugs)[1]; (2) where applicable and publicly available, identifying patents asserted in litigation (in the U.S and Europe) in relation to a product; and (3) conducting patent searches in Orbit Intelligence/Questel, CAS SciFinder, Lens.Org, and the Espacenet (the European Patent Office) databases using (i) keyword based search strings; (ii) inventor names; (iii) assignee/company names; (iv) compound structures (for small molecule drugs); (v) laboratory code names for a drug; and (vi) Chemical Abstracts Service (CAS) number and sequences (for biologics drugs including monoclonal antibodies).

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[1] Only patents that were listed on USFDA Orange Book (https://www.accessdata.fda.gov/scripts/cder/ob/index.cfm) and Purple Book (https://purplebooksearch.fda.gov/patent-list) websites as of June 2022 were included in the patent landscape.

Definitions

Assignee: The current proprietor of the granted patent or patent application.

Condition(s) Treated: The main disease category for which each drug is used, based on all U.S.FDA approved clinical indications through 2021.

Drug Name: The brand name under which the drug product is marketed.

Drug Type:

- *Small Molecule:* A category of medicines comprised of organic chemical compounds – or more commonly, pills that are swallowed.
- *Biologic:* A category of medicines such as therapeutic proteins and monoclonal antibodies derived from living cells – or more commonly, drugs that are injected into the body.

Family: A collection of granted patents and patent applications that originate from an earlier application, cover the same/similar technical content, and are related to each other because they share a priority claim and priority date. For the purpose of the database, patent families are grouped by number (e.g., Family 1, 5, 30, etc.).

FDA Approval: Whether the patent was filed before or after a drug was approved by the U.S.FDA and available on the U.S market.

Granted/Publication/Reissued Date:

- *Granted Date:* The date a patent is granted and ceases being a patent application.
- *Publication Date:* The date a patent application is first published for public viewing.
- *Reissued Date:* The date of reissue of a corrected patent, where errors in the patents were made without any deceptive intention.

Orange Book/Purple Book: Whether a patent is listed on the U.S. FDA Orange or Purple Book (applies to granted patents only).

Patent Number: The number given to a granted patent, which is made up of 6 to 8 characters (e.g., US7390791B2).

Priority Date: The date of the first patent application filed for an invention, and which is used to establish the novelty or inventiveness of the invention in relation to prior art.

Publication Number: The number assigned to a patent application when it is published (18 months from the filing date). The number is made up of a four-digit year, followed by a seven-digit sequence, followed by a two-character Kind Code (e.g., US20170232019A1). Published patent applications are not granted patents.

Status:

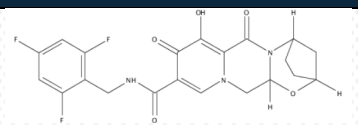
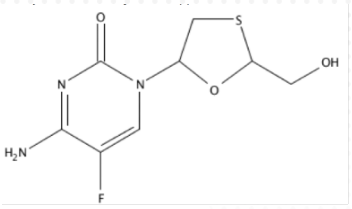
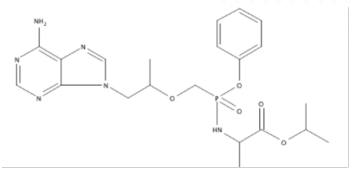
- *Abandoned:* The patent application has been removed from the patent office docket of pending applications. A patent application becomes abandoned for failure to file a complete and proper reply as the condition of the application may require within the time period provided, or failure to pay required maintenance fees. Abandoned patent applications may be revived more than two years after abandonment if the delay was unintentional.
- *Active:* The patent is granted and is currently in force.
- *Expired:* The patent was granted but has expired either because the term of protection has ended or the assignee failed to pay the required maintenance fee to keep the patent active.
- *Pending:* The patent application is still on the patent office docket and under examination.

Patent Type:

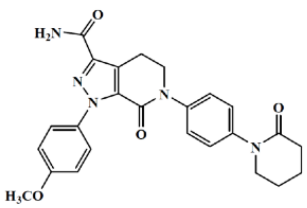
- *Biomarker:* Method to measure the actions of a drug.
- *Crystalline:* Crystal structures inherent within the main compound, and can vary in their physicochemical properties (does not change biological properties).
- *Derivative:* Structural variations of the main compound are filed as part of the main patents for the broadest protection.
- *Device:* Used for delivering a drug (e.g., syringe, injector pen, wearable devices).
- *Enantiomer / Stereoisomer:* Molecular forms of the main compound (small molecule drug), but which exist in different forms and spatial arrangement of their structures.
- *Formulation / Combination:* Pharmaceutical preparations, including ingredients, to help deliver the drug into the human body.
- *Kit:* A kit for administering a drug to a patient for a period of time according to a specific regimen, including memory aids for ease of compliance.
- *Main Compound:* Covers the active substance used in a small molecule drug. These types of patents typically have the broadest scope.
- *Method of Delivery:* Method of controlling the distribution of a drug to patients, including information for at-risk patient groups and how pharmacies fill prescriptions.
- *Method of Diagnosis:* Method to identify patients that are most likely to respond to treatment.
- *Method of Production / Process:* Method or process for manufacturing a biological product or small molecule compound, including derivatives, crystalline forms, and intermediate compounds used to make the final product or main compound and formulations.
- *Method of Treatment:* Specific indications (diseases) that can be treated with a biologic or small molecule drug alone, or in combination with another drug(s).
- *Packaging:* Packaging and containers used for the pharmaceutical product or device.
- *Product:* Covers the antibody, antibody fusion proteins, and vectors for delivery to the relevant site in the human body.
- *Salt Form:* The pairing of a small molecule compound (main compound) with a counterion (ion) to create a salt version of the compound to improve the bioavailability, stability, manufacture, and patient compliance.

Individual Drug Methodologies

BIKTARVY

Search Type	Query	Methodology / Notes
Compound Structure	  	As Biktarvy is a 3 drug combination, searches were conducted against each compound that makes up the product: bictegravir, emtricitabine, and tenofovir alafenamide. Structure search carried out using CAS Scifinder.
Keyword Search	Gilead Biktarvy; or (2097023_87_3); or (2097023 2W “87” 2W “3”); or Bictegravir; or Emtricitabine; or Tenofovir	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Orange Book to ensure patents were captured in the raw patent data.	
Assignee/ Licenses	In addition to searching the originator name of each compound, we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	None.	

ELIQUIS

Search Type	Query	Methodology
Compound Structure		We referred to FDA Label and other approved documents to obtain structure inputs for such searches. We also checked for the possibility of tautomer, isomer, oxides etc., for accuracy of the search. For example, apixaban has =O on the N-ring to the right-hand side, a tautomer can have -OH and still qualify under the same substance. Structure search carried out using CAS Scifinder.
Keyword Search Strings	• Apixiban and/or Eliquis; or • (503612_47_3); or • (503612 2W "47" 2W "3") ; or • (BMS_562247); or • (BMS562247); or • (BMS 2W "562247)"; or • BMS_562247_01	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Chemical Names	("4" 2W Methoxyphenyl 3W "7" 2W oxo 2W "6" 2W "4" 2W "2" 2W oxopiperidin+); or ("4" 2W Methoxyphenyl 3W "7" 2W oxo 2W "6" 2W "4" 2W "2" 2W oxo_piperidin+); or (1__4_Methoxyphenyl_7oxo64_2oxopiperidin+); or (1_4_Methoxyphenyl_7oxo64_2_oxo+)	Chemical terms were further optimized to capture tautomers and such. Chemical names searched using Orbit Intelligence/Questel and Lens.org.
Orange / Purple Book	Cross check with the Orange Book to ensure patents were captured in the raw patent data.	
Assignee / Licenses	In addition to searching against the originator name i.e. Bristol Myers Squibb, we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	Patents were excluded if there was no specific or broad relationship to the product.	

ENBREL

Search Type	Query	Methodology
Antibody Sequence	LPAQVAFTPYAPEPGSTCRLREYYDQTAQMCCSKCSPGQHAK VFCTKTSDTVCDSCEDSTYTQLWNWVPECLSCGSRCSSDQVE TQACTREQNRICTCRPGWYCALSKQEGCRLCAPLRKCRPGFG VARPGTETSDVVCKPCAPGTFSNTTSSTDICRPHQICNVVAIPG NASMDAVCTSTSPTRSMAPGAVHLPQPVSTRSQHTQPTPEPS TAPSTSFLLPMGPSPPAEGSTGDEPKSCDKTHTCPPCPAPELL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWY VDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYK CKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVS LTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLY SKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK	Sequence of etanercept was retrieved from US9182410B1 (Sandoz). Sequence search carried out using CAS Scifinder.
Keyword Search	• Etanercept and /or Enbrel; or • Benepali; or • Erelzi; or • Eticovo; or • Davictrel; or • CHS_0214; or • DWP_422; or • ENIA_11; or • HD_203; or • GP_2015C; or • GP_2015; or • LBEC_0101; or • L04_AB01; or • (RHU_ TNFR_FC); or • (RHU 2W TNFR 2W “FC”); or • TNFR_Immunoadhesin; or • (TNFR 2W Immunoadhesin); or • (185243_69_0); or • (185243 2W “69” 2W “0”); or • TNF; or • TNFα; or • TNFR; or • (tumor 2W necrosis 2W factor?)) 5D (antibod and/or block and/or antagonist and/or ligand and/or bind and/or (Fusion 2W Protein?))	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Purple Book to ensure patents were captured in the raw patent data.	
Assignee / Licenses	In addition to searching against the originator name (Amgen), we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	Patents were excluded if: • If the active ingredient was not included in the claims with the device. • If the text of the patent did not mention etanercept and the claims were general about the device use.	

	However, where the patent document described that the device/formulation in the claimed invention could be applied to various active ingredients, including etanercept, these patents were included in the dataset.

EYLEA

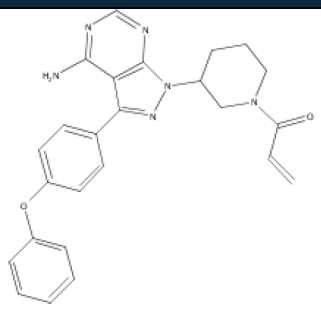
Search Type	Query	Methodology
Antibody Sequence	MVSYWDTGVLLCALLSCLLLTGSSSGSDTGRP FVEMYSEIPEIIHMTEGRELVIPCRVTSPNITVTL KKFPLDTLIPDGKRIIWDSRKGFIISNATYKEI.	Sequence of aflibercept was retrieved from US7070959 and US 7279159 (Regeneron Pharmaceuticals). Sequence search carried out using CAS Scifinder.
Keyword Search	• Aflibercept and/or Eylea; or • Zaltrap; or • (862111_32_8); or • (VEGF 2D Trap+); or • (AVE_0005); or • (AVE_005); or • (AVE W 005); or • (Bay_86_5321); or • (Bay W 86 W 5321); or • 862111-32-8 • (VEGF OR (vascular W endothelial W growth W factor)) 2D receptor?); or • VEGFR??; or • vascular_endothelial_growth_factor_receptor?)) (fused or fusion) (FC or constant or IGG or IG_G or immuno_globulin and/or immuno_globin; or	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Purple Book to ensure patents were captured in the raw patent data.	
Assignee/ Licenses	In addition to searching against the originator name (Regeneron), we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	Patents were excluded if: • There was no specific or broad relationship to the product. Filed by Sanofi (alone or with Regeneron) because they relate to a separate product with a separate indication (Zaltrap), even though it uses the same active ingredient (in combination). Patents in the name of Genentech that were licensed to Regeneron were included in the dataset.	

HUMIRA

Search Type	Query	Methodology
Antibody Sequence	Adalimumab (VL region sequence) DIQMTQSPSSLSASVGDRVTITCRASQGIRNYLAWY QQKPGKAPKLLIYAASTLQSGVPSRFSGSGSGTDFT LTISSLQPEDVATYYCQRYNRAPYTFGQGTKVEIK Adalimumab (VH region sequence) EVQLVESGGGLVQPGRSLRLSCAASGFTFDDYAMH WVRQAPGKGLEWVSAITWNSGHIDYADSVEGRFTIS RDNAKNSLYLQMNSLRAEDTAVYYCAKVSYLSTAS SLDYWGQGTLVTVSS	Sequence of adalimumab was retrieved from US 8961973. Sequence search carried out using CAS Scifinder.
Keyword Search	• Humira; or • Adalimumab; or • Mabura; or • Exemptia; or • Abrilada; or • Amjevita; or • Cyltezo; or • Hadlima; or • Hulio; or • Hyrimoz; or • Yusimry; or • Trudexa; or • Hukyndra; or • Libmyris; or • AVT02; or • AVT_02; or • (331731_18_1); or • (331731 2W “18” 2W “1”); or • D2E7; or • ((((tumor 2W necrosis 2W factor?); or • TNF) 2W alpha); or • TNF_alpha; or • hTNF?; or • TNF?; or • TNFα; or • (tumor 2W necrosis 2W factor?)) 5D (antibod+ or block+ or antagonist+ or ligand+or bind+)	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Purple Book to ensure patents were captured in the raw patent data.	
Assignee/ Licenses	In addition to searching against the originator name (Abbott/AbbVie), we checked for patents for all relevant entities involved in the development and research of the drug.	

Exclusion Criteria	Patents were excluded if: • If the active ingredient was not included in the claims with the device; • If the text of the patent did not mention adalimumab; While US8708968 did not include any reference to adalimumab, it is listed in the Purple Book and was included.

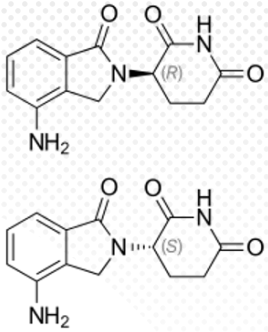
IMBRUVICA

Search Type	Query	Methodology
Compound Structure		Structure search carried out using CAS Scifinder.
Keyword Search Strings	• Ibrutinib and/or Imbruvica; or • PCI_32765; or • CRA_032765; or • Pc_32765; or • (936563_96_1); or • (936563 2W "96" 2W "1")	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder
Chemical Names	• (4__amino__3___4__phenoxyphenyl__1H__pyrazolo__3__4__d__pyrimidin__1__yl__piperidin__1__yl__prop__2__en__1__one); or • ("4" 3W amino 3W "3" 3W "4" 3W phenoxyphenyl 3W 1H 3W pyrazolo 3W "3" 3W "4" 5W pyrimidin 5W piperidin+); or • (3__4__amino__3___4__phenoxyphenyl___1H__pyrazolo__3__4__d__pyrimidin__1__yl___1__piperidinyl); or • (3__4__Amino__3__4__phenoxyphenyl__pyrazolo__3__ 4__d__pyrimidin__1__yl__piperidin__1__yl__prop+)	Chemical names searched using Orbit Intelligence/Questel and Lens.org.
Orange / Purple Book	Cross check with the Orange Book to ensure patents were captured in the raw patent data.	
Assignee / Licenses	In addition to searching against the originator name i.e.Abbott/AbbVie, we checked for patents for all relevant entities involved in the development and research of the drug, i.e. Pharmacyclics.	
Exclusion Criteria	Patents were excluded if the assignee was Janssen Pharmaceutica Nv or Ohio State Innovation Foundation.	

KEYTRUDA

Search Type	Query	Methodology
Antibody Sequence	Pembrolizumab (Light Chain) Length – 218 AA EIVLTQSPATLSLSPGERATLSCRASKGVSTSGYSYL HWYQQKPGQAPRLLIYLASYLESGVPARFSGSGSGT DFTLTISSLEPEDFAVYYCQHSRDLPLTFGGGTKVEIK RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREA KVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTL TLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC Pembrolizumab (Heavy Chain) Length – 447 AA QVQLVQSGVEVKKPGASVKVSCKASGYTFTNYYMY WVRQAPGQGLEWMGGINPSNGGTNFNEKFKNRVT LTTDSSTTTAYMELKSLQFDDTAVYYCARRDYRFDM GFDYWGQGTTVTVSSASTKGPSVFPLAPCSRSTSES TAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL QSSGLYSLSSVVTVPSSSLGTKTYTCNVDHKPSNTK VDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKD TLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEV HNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEY KCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY KTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSV MHEALHNHYTQKSLSLSLGK	Heavy and light chain variable sequences of Pembrolizumab were retrieved from WO2017205216A1 (Eli Lilly And Company, Merck Sharp & Dohme Corporation). Sequence search carried out using CAS Scifinder.
Keyword Search	Pembrolizumab (specific term set) • Pembrolizumab and/or Keytruda; or • MK_3475; or • Lambrolizumab; or • Merck_3475; or • Sch_900475; or • (1374853_91_4); or • (1374853 2W “91” 2W “4”) PD-1 antibody/ binding fragment ligand (Broad drug category term set) • ((Programmed 2W death) or PD_1) 5D (antibod+ or block+ or antagonist+ or ligand+ or bind+)	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Purple Book to ensure patents were captured in the raw patent data.	
Assignee/ Licenses	In addition to searching against the originator name i.e. Merck, we checked for patents for all relevant entities involved in the development and research of the drug, i.e. Ono Pharmaceutical.	
Exclusion Criteria	Patents were excluded if: • Could not identify whether the claims were relevant to the product. • The Assignee was Bristol Myers Squibb and the patent related to the product Opdivo.	

REVLIMID

Search Type	Query	Methodology
Compound Structure		Structure search carried out using CAS Scifinder.
Keyword Search	• Lenalidomide and/or Revlimid; or • CC_5013 OR IMiD3_cpd; or • (191732_72_6); or • (191732 2W "72" 2W "6") • Revimid; or • CDC_501	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Chemical Names	• (2__6__Piperidinedione__3__4__amino__1__3__dihydro__1__oxo__2H__ isoindol__2__yl); or • ("2" 3W "6" 3W Piperidinedione 3W "3" 3W "4" 3W amino 3W "1" 3W "3" 3W dihydro 3W Oxo 3W 2H 3W isoindol); or • (3__4__Amino__1__oxo__1__3__dihydro__2H__isoindol__2__yl__piperidine__2__6__dione); or • ("3" 3W "4" 3W Amino 3W "1" 3W oxo 3W "1" 3W "3" 3W dihydro 3W 2H 3W isoindol 3W "2" 3W yl 3W piperidine 3W "2" 3W "6" 3W dione); or • (3__4__Amino__1__oxoisoindolin__2__yl__piperidine__2__6__dione)	Chemical names searched using Orbit Intelligence/Questel and Lens.org.
Orange / Purple Book	Cross check with the Orange Book to ensure patents were captured in the raw patent data.	
Assignee / Licenses	In addition to searching against the originator name i.e. Celgene, we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	Patents were excluded if there was no specific or broad relationship to the product. Additionally, all patents filed by Millennium Pharmaceuticals were excluded because they are not related to the originator or the actual product via licensing, litigation, etc.	

STELARA

Search Type	Query	Methodology
Antibody Sequence	Heavy Chain EVQLVQSGAEVKKPGESLKISCKGSGYSFTTYWLGW VRQMPGKGLDWIGIMSPVDSDIRYSPSFQGQVTMS VDKSITTAYLQWNSLKASDTAMYYCARRRPGQGYF DFWGQGTLVTVSSSSTKGPSVFPLAPSSKSTSGGTA ALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQ SSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKV DKRVEPKSCDKTHTCPP CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTY RVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS KAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFY PSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSK LTVDKSRWQQGNVFSCSVMHEALHNHYTQ KSLSLSPGK Light Chain DIQMTQSPSSLSASVGDRVTITCRASQGISSWLAWY QQKPEKAPKSLIYAASSLQSGVPSRFSGSGSGTD FTLTISSLQPEDFATYYCQQYNIYPYTFGQGTKLEIKR TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAK VQWKVDNALQSGNSQ ESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEV THQGLSSPVTKSFNRGEC.	Sequence search carried out using CAS Scifinder.
Keyword Search	• (Janssen or Centocor); or • Ustekinumab and/or Stelara; or • (815610_63_0); or • (815610 2W “63” 2W “0”); or • 815610-63-0 • (CNTO_1275); or • (CNTO 2W “1275”); or • CNTO1275 OT TT20; or • TT_20 OR (TT 2W “20”)	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Purple Book to ensure patents were captured in the raw patent data.	
Assignee / Licenses	In addition to searching against the originator name i.e. Janssen, we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	Patents were excluded if they included a protein that relates to an antibody that targets IL-23. Stelara targets IL-12, and therefore patents referencing only IL-23 are not relevant to the Stelara product. Those patents that included both IL-23 and IL-12, and therefore target Stelara, were included.	

TRULICITY

Search Type	Query	Methodology
Keyword Search	• (Eli 2W Lilly); or • Dulaglutide and/or Trulicity; • 923950-08-7 • 923950-08-7; or • (923950_08_7); or • (923950 2W "08" 2W "7"); or • (GLP_1Fc); or • (GLP 2W 1Fc); or • GLP1Fc; or • LY2189265; or • LY_2189265	Keyword searches carried out using Orbit Intelligence/Questel and Lens.org. CAS number search carried out using CAS Scifinder.
Orange / Purple Book	Cross check with the Purple Book to ensure patents were captured in the raw patent data.	
Assignee / Licenses	In addition to searching against the originator name i.e.Eli Lilly, we checked for patents for all relevant entities involved in the development and research of the drug.	
Exclusion Criteria	None.	

Disclaimer

The patent data provided in the Drug Patent Book does not constitute a legal opinion of any kind or nature. Whether a patent is related to a particular drug is subject to legal interpretation of the claims in a patent or patent application. Users should obtain the opinion of legal counsel if they are seeking more detailed analysis as to the relevance of a patent or patent application in relation to a drug covered in the database.

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