

Biosimilar IP Landscaping & 351(k) Litigation



Presenters



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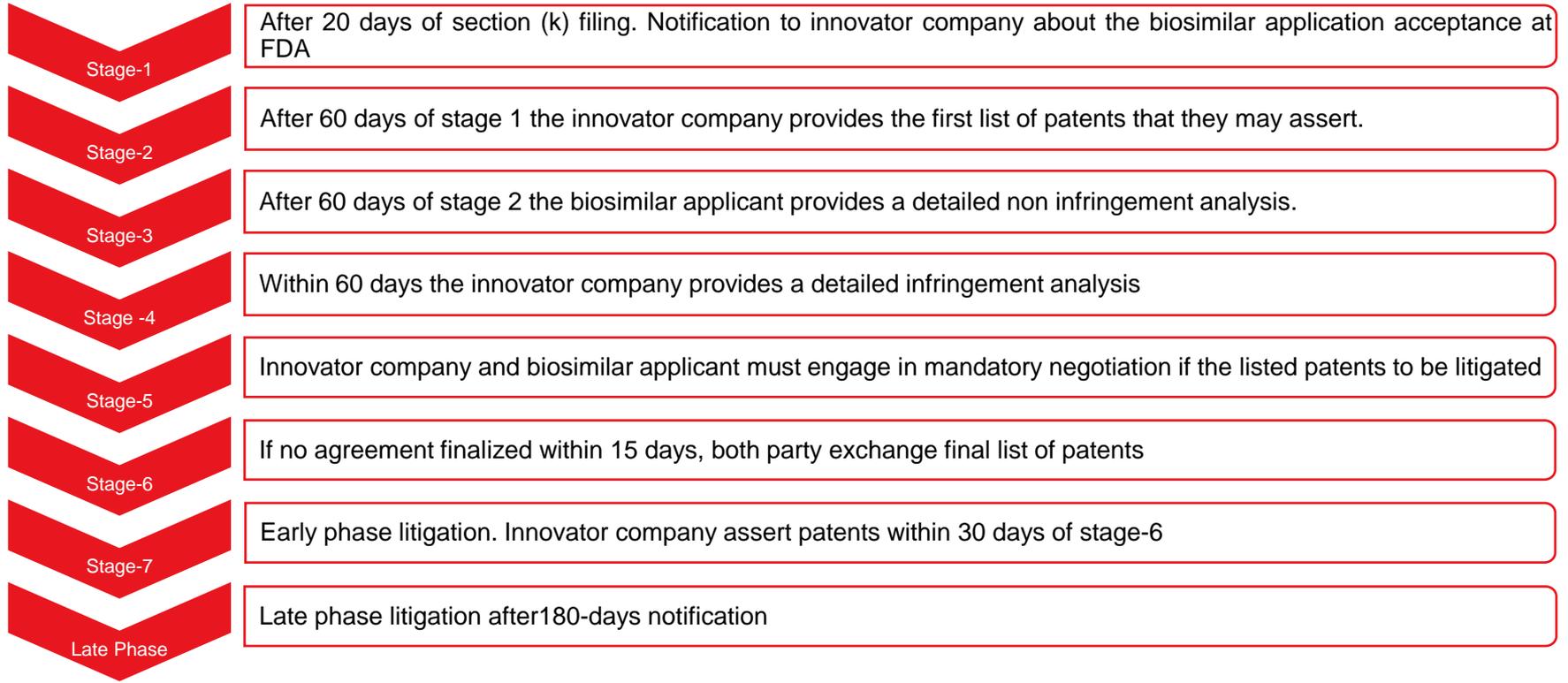
Today's Discussion

- IP Due Diligence (Why?)
- Biosimilar Legal Stories
- Innovator's Portfolio Analysis
- Technology Driven Analysis

Biosimilar Development- IP Due Diligence (Why?)

- 351(k) Litigation: Early & Late Phase Litigation
- Multiple waves of Litigation (Patent Dance)
- Clear the path of patents prior to expected launch
- Categorization of patents and evaluation of patent term/remaining life

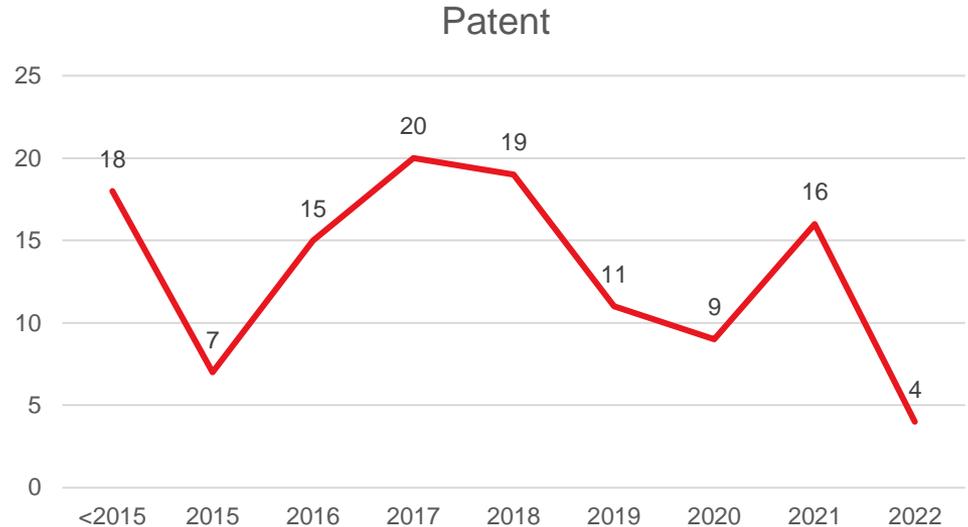
351(k) Litigation: Early & Late Phase Litigation



Trends in Biosimilar Litigation in Federal District Courts

Courts

D.Del.	56	47%
D.N.J.	23	19%
D.Mass.	7	6%
N.D.Cal.	6	5%
N.D.Ill.	4	3%
Other Courts	22	19%



Data Source**: The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina®**

** Data is obtained by using customized filters and boolean query over the dashboard.

Top Parties in Biosimilar Litigation

S. No	Party	Total Cases	Cases as Plaintiff	Cases as Defendant	Cases as Third Party
1	Amgen Inc.	39	27	11	1
2	Actavis Elizabeth, LLC	29	0	29	0
3	Teva Pharmaceuticals International	25	10	12	3
4	Celltrion, Inc.	22	8	14	0
5	Genentech, Inc.	21	16	5	0
6	Sandoz, Inc.	18	3	12	3
7	AbbVie Inc.	16	10	6	0
8	City of Hope	15	12	3	0
9	Hospira, Inc.	9	1	7	1
10	Allergan PLC	8	0	8	0
11	Apotex Inc.	8	0	7	1
12	Hoffmann-La Roche Inc.	7	5	2	0
13	Janssen Biotech, Inc.	7	5	2	0
14	Aurobindo Pharma Ltd.	5	0	5	0
15	Biogen, Inc.	5	3	1	1
16	Eli Lilly & Co	5	3	2	0
17	Lupin Ltd.	5	0	3	2
18	Mylan Pharmaceuticals, Inc.	5	0	4	1
19	Sanofi-Aventis U.S. LLC	5	4	1	0
20	Watson Laboratories, Inc.	5	0	4	1

Case Resolutions

Likely Settlement	50	42%
Likely Settlement	50	42%
Procedural Resolution	25	21%
Contested Dismissal	8	7%
Dismissal	4	3%
Consolidation	7	6%
Severance	0	0%
Interdistrict Transfer	1	1%
Intradistrict Transfer	1	1%
Stay	2	2%
Multidistrict Litigation	2	2%
No Case Resolution	19	16%
Open Cases	19	16%
Remaining Federal	0	0%
Other	0	0%

Claim Defendant Win	12	10%
Default Judgment	0	0%
Consent Judgment	3	3%
Judgment on the Pleadings	1	1%
Summary Judgment	4	3%
Trial	3	3%
Judgment as a Matter of Law	1	1%
Decision on Bankruptcy Appeal	0	0%

Claimant Win	12	10%
Default Judgment	0	0%
Consent Judgment	3	3%
Judgment on the Pleadings	0	0%
Summary Judgment	0	0%
Trial	8	7%
Judgment as a Matter of Law	1	1%
Decision on Bankruptcy Appeal	0	0%

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Patent Findings by Judgement Events

Findings	Default Judgment	Consent Judgment	Judgment on the Pleadings	Summary Judgment	Judgment as a Matter of Law	Trial	Any Judgment Event	
Infringement	0	9	0	0	9	1	15	
No Infringement	0	6	1	6	6	0	15	
Invalidity	0	1	0	5	7	1	13	
No Invalidity	0	2	0	1	13	1	14	
Unenforceability	0	0	0	0	1	0	1	
No Unenforceability	0	2	1	2	1	1	7	

Data Source**: The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina®**

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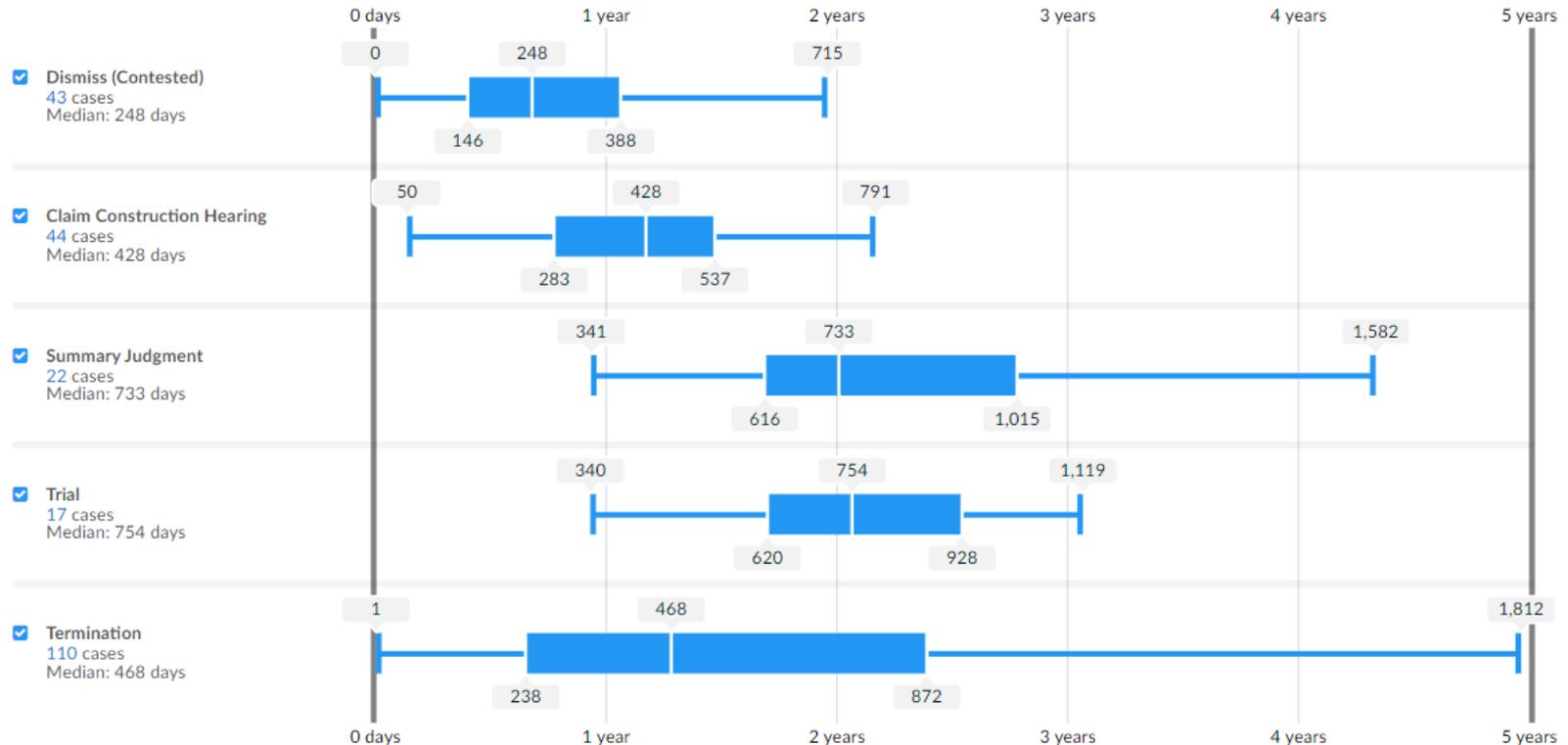
Patent Invalidation Reasons by Judgement Events

Invalidity Reasons	Default Judgment	Judgment on the Pleadings	Summary Judgment	Judgment as a Matter of Law	Trial	Any Judgment Event	
101 Subject Matter	0	0	0	0	0	0	0
102 Anticipation / Novelty	0	0	0	0	1	0	1
102(f) Derivation (pre-AIA)	0	0	0	0	0	0	0
102(g) Interference (pre-AIA)	0	0	0	0	0	0	0
103 Obviousness	0	0	0	0	3	0	3
112 Best Mode (pre-AIA)	0	0	0	0	0	0	0
112 Definiteness	0	1	0	1	0	0	2
112 Enablement	0	0	0	2	2	1	5
112 Written Description	0	0	0	2	4	0	6
133, 371 Application Abandonment	0	0	0	0	0	0	0
171 Improper Design Patent	0	0	0	0	0	0	0
132, 251, 255, 305 Defective Correction	0	0	0	0	0	0	0
Obviousness-Type Double Patenting	0	0	0	1	0	0	1
No Invalidation Reason Specified	0	0	0	0	0	0	0

Data Source**: The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina®**

** Data is obtained by using customized filters and boolean query over the dashboard.

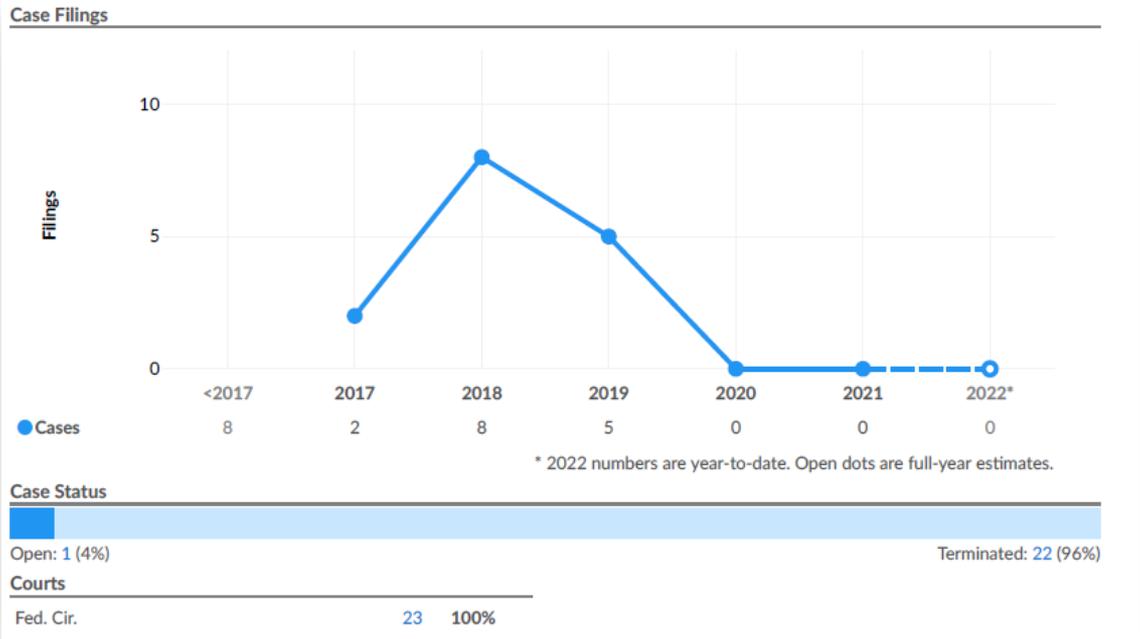
Event Timeline



Data Source**: The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina**[®]

** Data is obtained by using customized filters and boolean query over the dashboard.

Appeals: Filing Trend & Top Petitioner and Respondents



Top Appellant / Petitioner / Movants

Amgen Manufacturing, Limited

Amgen Inc.

Sandoz, Inc.

Hospira, Inc.

Genentech, Inc.

Top Appellee / Respondents

Amgen Inc.

Amgen Manufacturing, Limited

Sandoz, Inc.

Hospira, Inc.

Sandoz International GMBH

Data Source**: The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina®**

** Data is obtained by using customized filters and boolean query over the dashboard.

Appeals: Case Resolution

Case Resolutions

All Resolutions

Appellant Win
4 (17%)

Appellee Win
16 (70%)



Reversed or Affirmed		Cases	%
Reversed		1	4%
Affirmed / Reversed in Part		3	13%
Affirmed		16	70%
Total		20	87%

Appealability Resolution		Cases	%
Appealability Granted		0	0%
Appealability Denied		0	0%
Total		0	0%

Miscellaneous		Cases	%
Granted (Other)		0	0%
Denied (Other)		0	0%
Total		0	0%

Likely Settlement		Cases	%
Likely Settlement		0	0%
Total		0	0%

Procedural Resolution		Cases	%
Dismissal		2	9%
Consolidation		0	0%
Transfer		0	0%
Other Ruling		0	0%
Remand		0	0%
Total		2	9%

No Resolution		Cases	%
Open Cases		1	4%
Pending		0	0%
Total		1	4%

Reversal Rate of Reversed or Affirmed Cases

20%

Reversal rate

80%

Affirmance rate



The reversal rate is calculated by dividing the number of cases (4) that were either ● Reversed (1) or ● Affirmed / Reversed in Part (3) by the total number of cases (20) that were ● Reversed, ● Affirmed / Reversed in Part, or ● Affirmed (16).

Data Source**: The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina®**

** Data is obtained by using customized filters and boolean query over the dashboard.

Technology Driven Analysis:

Technology driven solutions such as LexMachina® can help in providing varied analysis for litigation:

- Analysis of parties involved
- Litigation analytics around Law firms, attorneys and their performance around given technology area
- Litigation venue analysis
- Analysis around litigation outcomes & appeal timelines

Biosimilars Legal Stories

Immunex, Amgen & Hoffmann-la Roche Inc Vs Samsung Bioepis

Enbrel Litigation

- Dispute over etanercept (Enbrel) patents
- Ruling in favor of the reference drug i.e., Immunex, Amgen, and Roche
- Samsung Bioepis prohibited from bringing its etanercept biosimilar (Eticovo) to the US market until 2029.
- The ruling will lapse when 2 key patents for etanercept expire on April 24, 2029

Patent	Title	Cases			District Court Findings						Damages
		District Court	PTAB	ITC	Infringement		Invalidity		Unenforceability		
					Yes	No	Yes	No	Yes	No	
7915225	Soluble tumor necrosis factor receptor treatment of medical disorders	2	0	0	0	0	0	0	0	0	
8063182	Human TNF receptor fusion protein	3	1	0	2	0	0	1	0	0	\$109,746.60
8119605	Soluble tumor necrosis factor receptor treatment of medical disorders	2	0	0	0	0	0	0	0	0	
8163522	Human TNF receptor	3	2	0	2	0	0	1	0	0	\$109,746.60
8722631	Soluble tumor necrosis factor receptor treatment of medical disorders	2	0	0	0	0	0	0	0	0	

* These analytics do not reflect voided or reversed Damages, Remedies, or Findings. [Learn more.](#)

Data Source: <https://www.centerforbiosimilars.com/view/the-top-5-biosimilars-legal-stories-of-2021> (AJMC, the center for Biosimilars)

The analytics and data is obtained from LexisNexis's proprietary solution **LexMachina**[®] using customized filters and boolean query over the solution dashboard

Biosimilars Legal Stories

AbbVie vs Alvotech

Adalimumab Litigation

- Alvotech plans to bring an adalimumab biosimilar (AVT02) to market by 2023
- AbbVie alleges that Alvotech had help from the Abbvie's ex-employee who had stolen confidential information regarding the manufacturing process for AVT02
- AbbVie & Alvotech settled the dispute, under the settlement agreement, Alvotech has non-exclusive rights to market AVT02 in the United States starting July 1, 2023
- AVT02 is approved in Europe, Canada, and the United Kingdom

Data Source: <https://www.centerforbiosimilars.com/view/the-top-5-biosimilars-legal-stories-of-2021> (AJMC, the center for Biosimilars)

Biosimilars Legal Stories

Amgen Inc. v. Hospira Inc

Epogen Litigation

- Hospira's seeks approval for marketing, a biosimilar to Amgen's Epogen
- Amgen alleged that 21 batches manufactured by Hospira of its biosimilar, infringed two of Amgen process patents
- The court found that that Hospira infringed patent US5,856,298, claiming methods of producing EPO isoforms
- Jury Awarded \$70 million in damages to Amgen even though Hospira's biosimilar product had not yet received FDA approval

Data Source: Fed. Circ. Amgen Biosimilar Ruling Raises IP Damages Risk By Paul Ainsworth and Michael Bruns.

Biosimilars Legal Stories

State of Mississippi Vs Eli Lilly, Novo Nordisk, and Sanofi-Aventis

Insulin Litigation

- The state of Mississippi filed suit against the 3 top insulin producers: Eli Lilly, Novo Nordisk, and Sanofi-Aventis, as well as the contracting pharmacy benefit managers of these players
- The civil suit was filed in Hinds County Chancery Court in Jackson, Mississippi, and contends that the defendants are running an “insulin pricing scheme” for profits
- The first insulin biosimilar (Semglee, insulin glargine) was approved in 2021, and this could help in downgrading the pricing in coming years. Nevertheless, regulators in the United States are hoping that a newly opened regulatory pathway for insulin biosimilars via the Biologics Price Competition and Innovation Act (BCPIA) could help in affordability of insulin for the patients

Data Source: <https://www.centerforbiosimilars.com/view/the-top-5-biosimilars-legal-stories-of-2021> (AJMC, the center for Biosimilars)

Biosimilars Marketed in the US

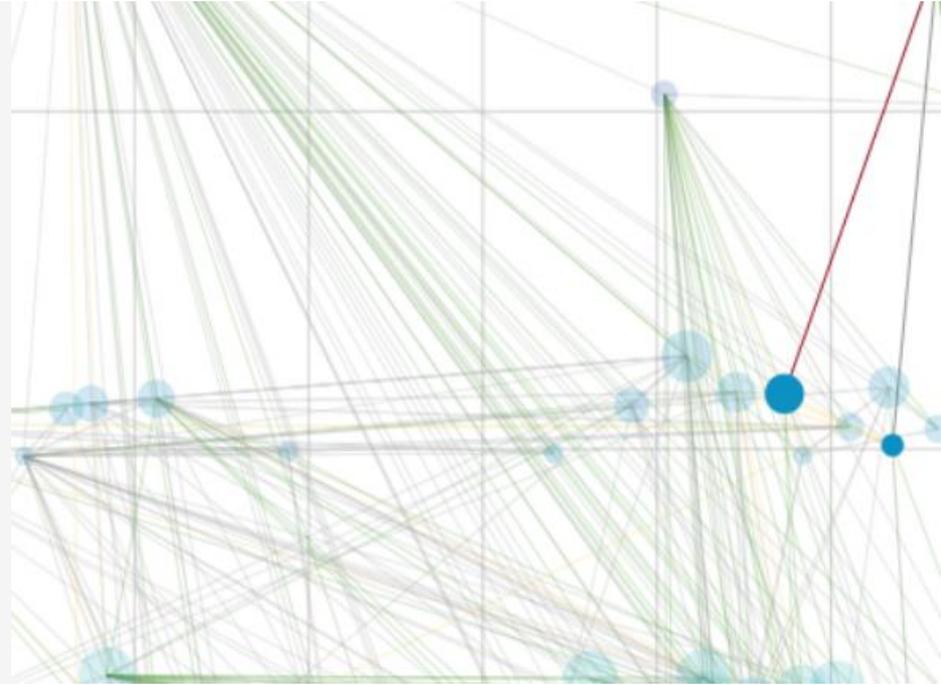
Company	Biosimilar	Innovator product	Launch date
Sandoz	Zarxio	Neupogen	Sept. 2015
Pfizer	Nivestym	Neupogen	Oct. 2018
Celltrion/Pfizer	Inflectra	Remicade	Nov. 2016
Samsung/Bioepis	Renflexis	Remicade	July 2017
Mylan/Biocon	Fulphila	Neulasta	July 2018
Coherus Biosciences	Udecyca	Neulasta	Jan. 2019
Sandoz	Ziextenzo	Neulasta	Nov. 2019
Pfizer	Retacrit	Epogen	Nov. 2018
Amgen/Allergan	Mvasic	Avastin	July 2019
Pfizer	Zirabev	Avastin	Dec. 2019
Amgen/Allergan	Kanjinti	Herceptin	July 2019
Mylan/Biocon	Ogivri	Herceptin	Dec. 2019
Teva/Celltrion	Truxima	Rituxan	Nov. 2019
Pfizer	Ruxience	Rituxan	Jan. 2020
Pfizer	Trazimera	Herceptin	Feb. 2020

Data Source: Irena Royzman and Khushbu Shah: 10 years of biosimilars: lessons and trends; Nature Reviews (Drug Discovery); Volume 19 ; June 2020; Page No.375. The data is produced for the information purpose only and has no competing interest.

Innovator's Portfolio Analysis

Why to Investigate the entire patent portfolio?

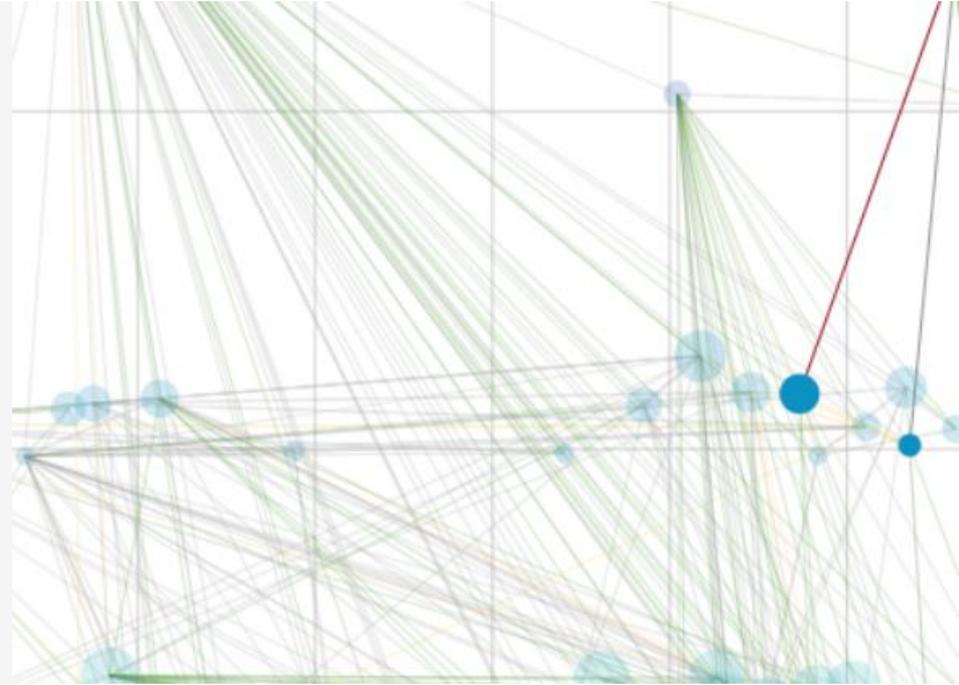
- Quality assessment of the patents owned in tech space
- Patents Owned by or Licensed to the innovator
- Prior assessment of Litigation Risk: Validity Assessment, Advance preparation of infringement arguments
- Continuous Monitoring of the innovator's portfolio
- Assessment of Design around opportunities
- Exploration of Licensing opportunity
- Identification of potential patents for pre-suit licensing negotiations



Innovator's Portfolio Analysis

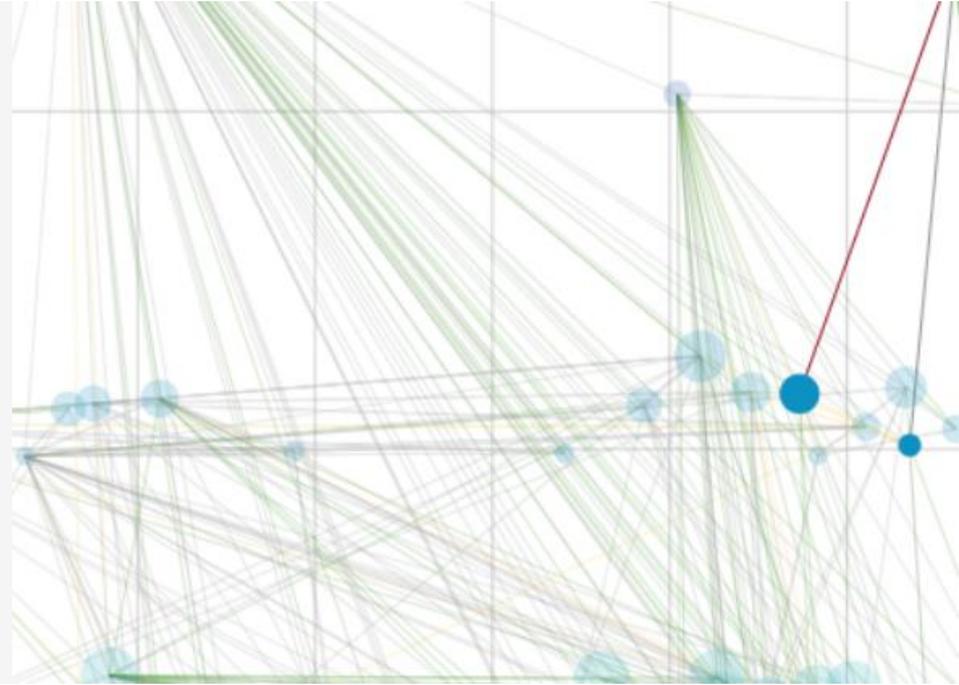
Identification of usual types of patents commonly asserted in litigation

- Composition/Formulation
- Method of use
- Method of manufacturing
- Delivery methods/modes of delivery
- Dosage, purification, safety analysis
- Packaging & Storage



Innovator's Portfolio Analysis

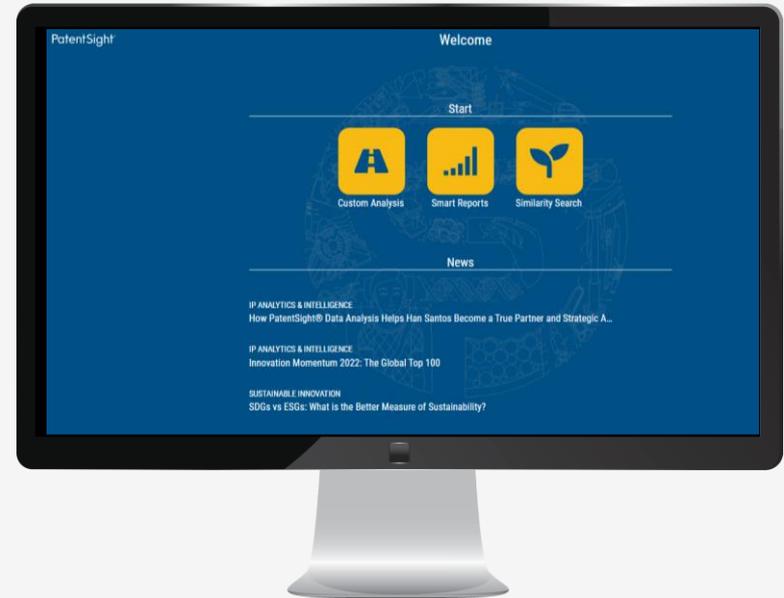
- Prioritizing the patents of high value and assess their strength
- Litigation outcome analysis
- Annuity Fee analysis in case of potential licensing opportunities



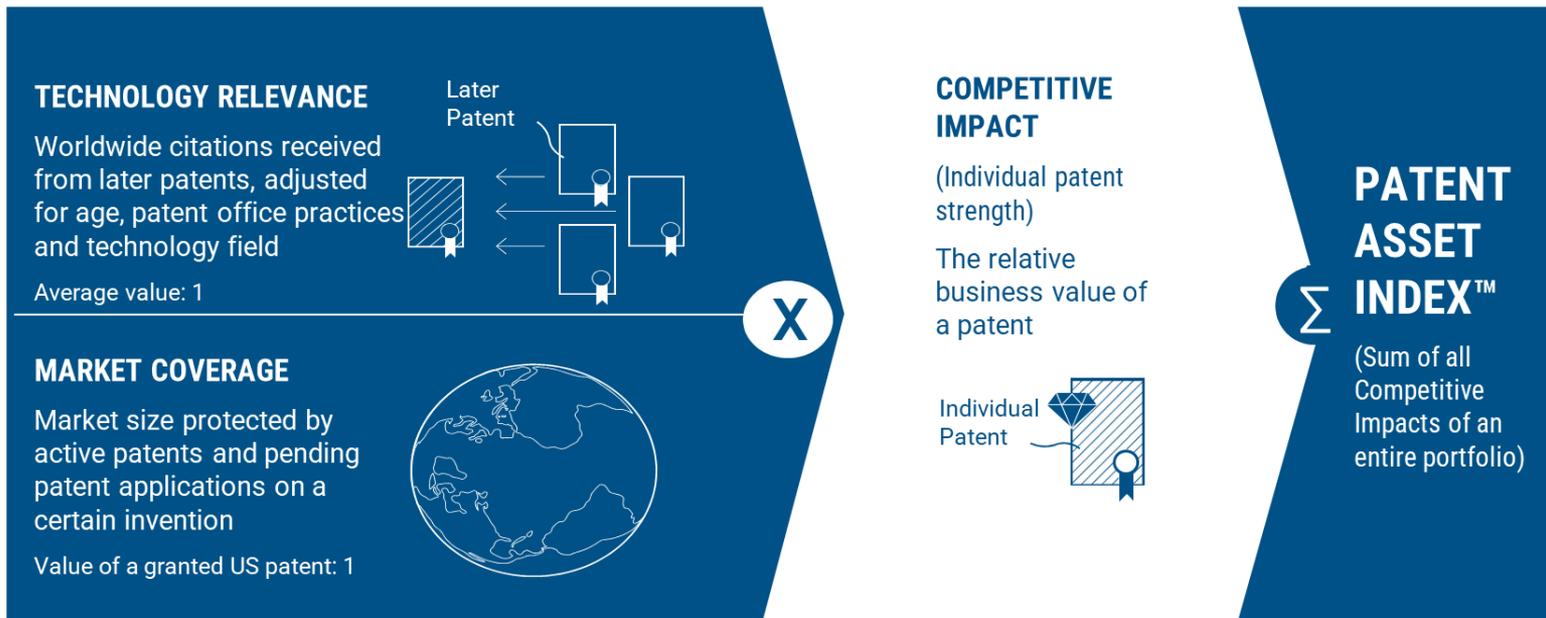
Technology Driven Analysis

How PatentSight® can assist?

- Instant analysis of given company's entire portfolio with scientifically proven methodology without having to go for lengthy manual analysis
- Easy to use dashboard.
- Customizable & multiple graphical analysis with multi-format export function
- An array of web platform that can be interconnected to run multi level patent analysis such as patent landscape, portfolio analysis, competitor benchmarking patent search to diverse insights for litigation.



The Patent Asset Index™ Methodology

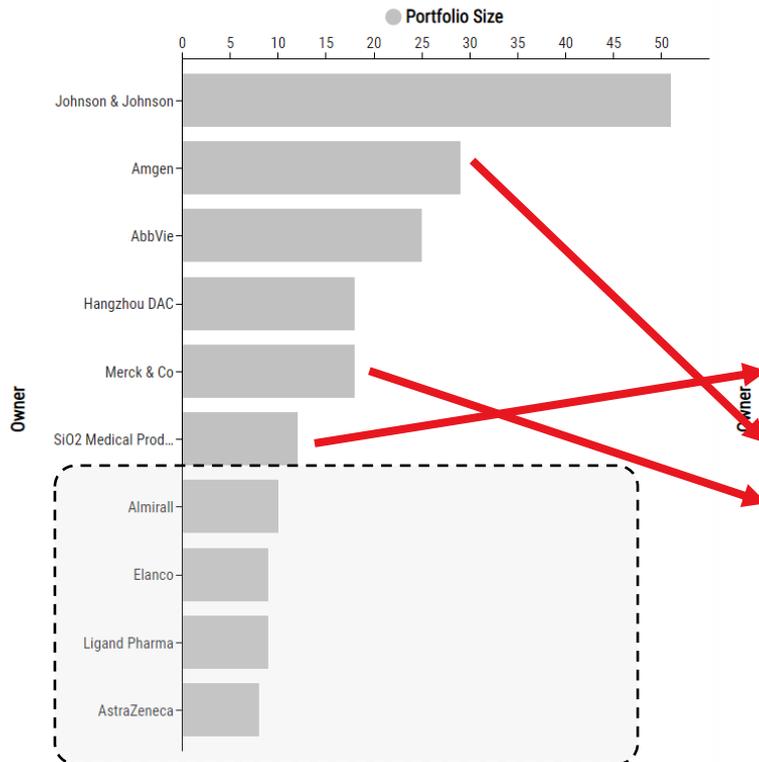


The scientific publication was made in: Ernst, H., Omland, N. (2011): The Patent Asset Index™ – A New Approach to Benchmark Patent Portfolios. World Patent Information 33, pp. 34–41. An overview can be found in the document “Introduction to the Patent Asset Index™” available from PatentSight.

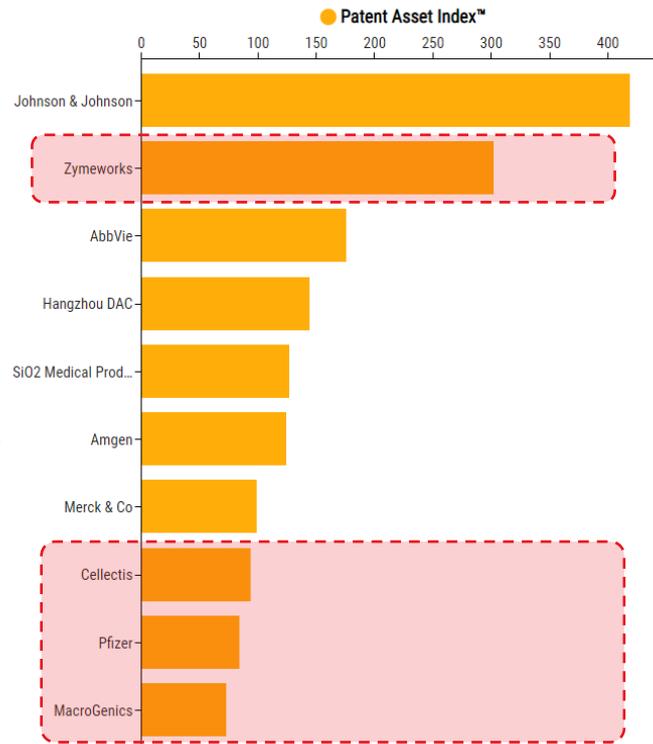
PatentSight® : A Stelara Case Study

Main Players in Stelara Market

Portfolio Size

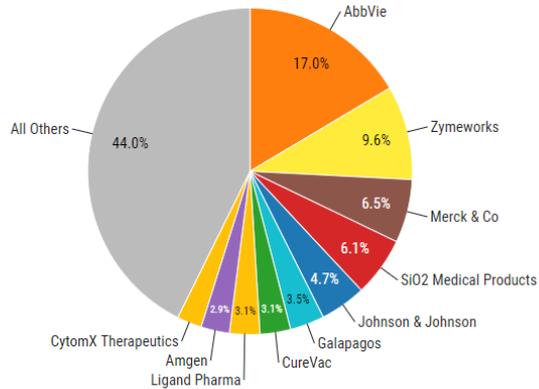


PAI



Changes in Stelara Market Share

2017

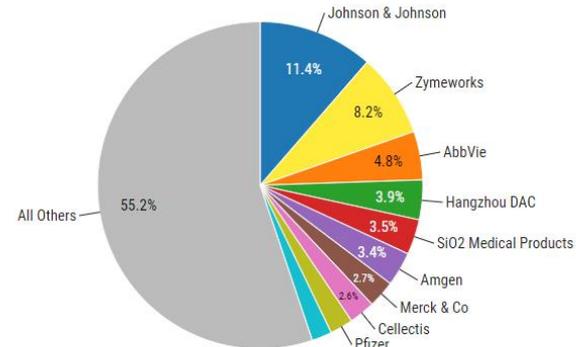


Slices: Owner Slice Size: Patent Asset Index™

Owner

- AbbVie
- Zymeworks
- Merck & Co
- SiO2 Medical Prod...
- Johnson & Johnson
- Galapagos
- CureVac
- Ligand Pharma
- Amgen
- CytomX Therapeut...
- All Others
- ◀ 1-10 ▶

2022



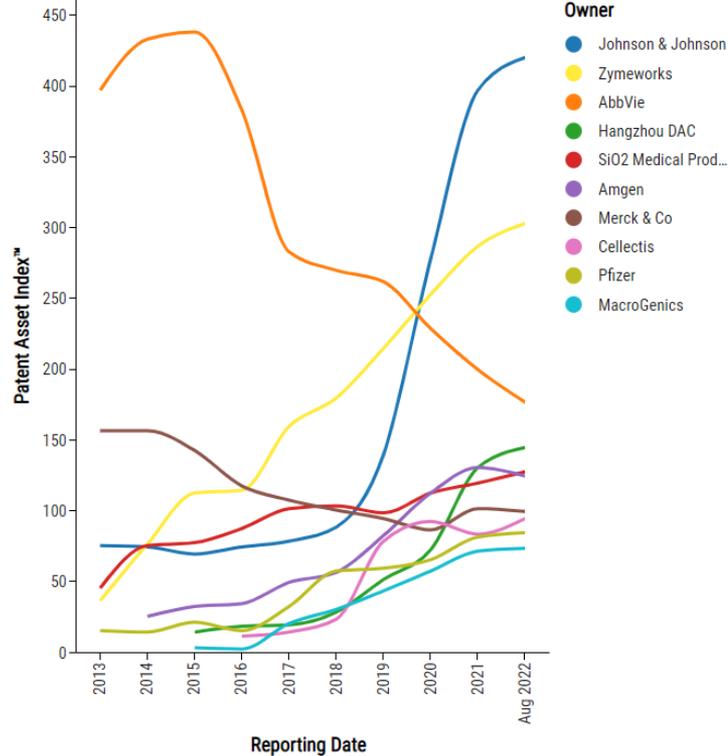
Slices: Owner Slice Size: Patent Asset Index™

Owner

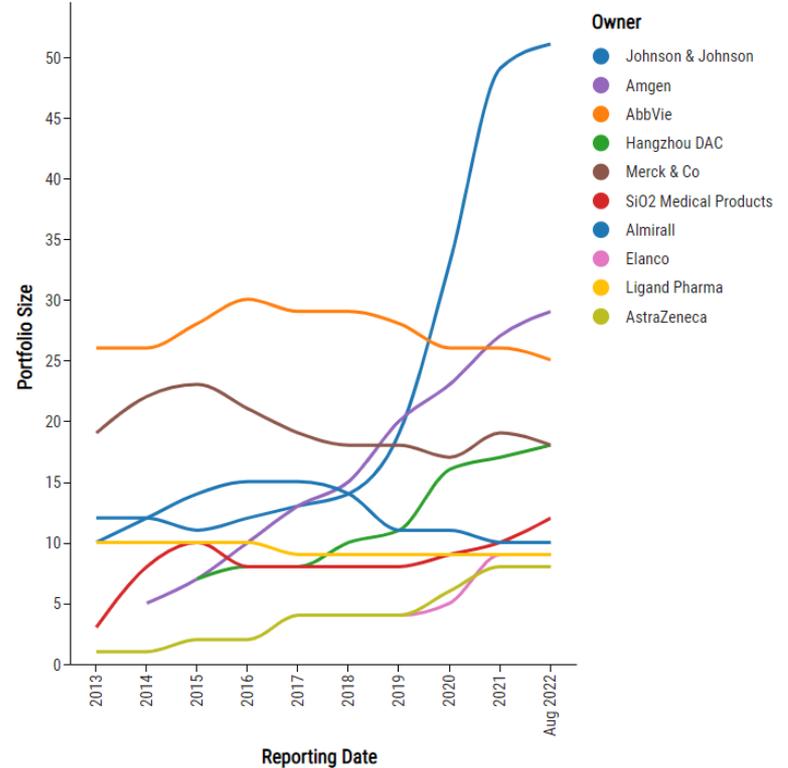
- Johnson & Johnson
- Zymeworks
- AbbVie
- Hangzhou DAC
- SiO2 Medical Prod...
- Amgen
- Merck & Co
- Collectis
- Pfizer
- MacroGenics
- All Others

Player's Trend in Stelara Market

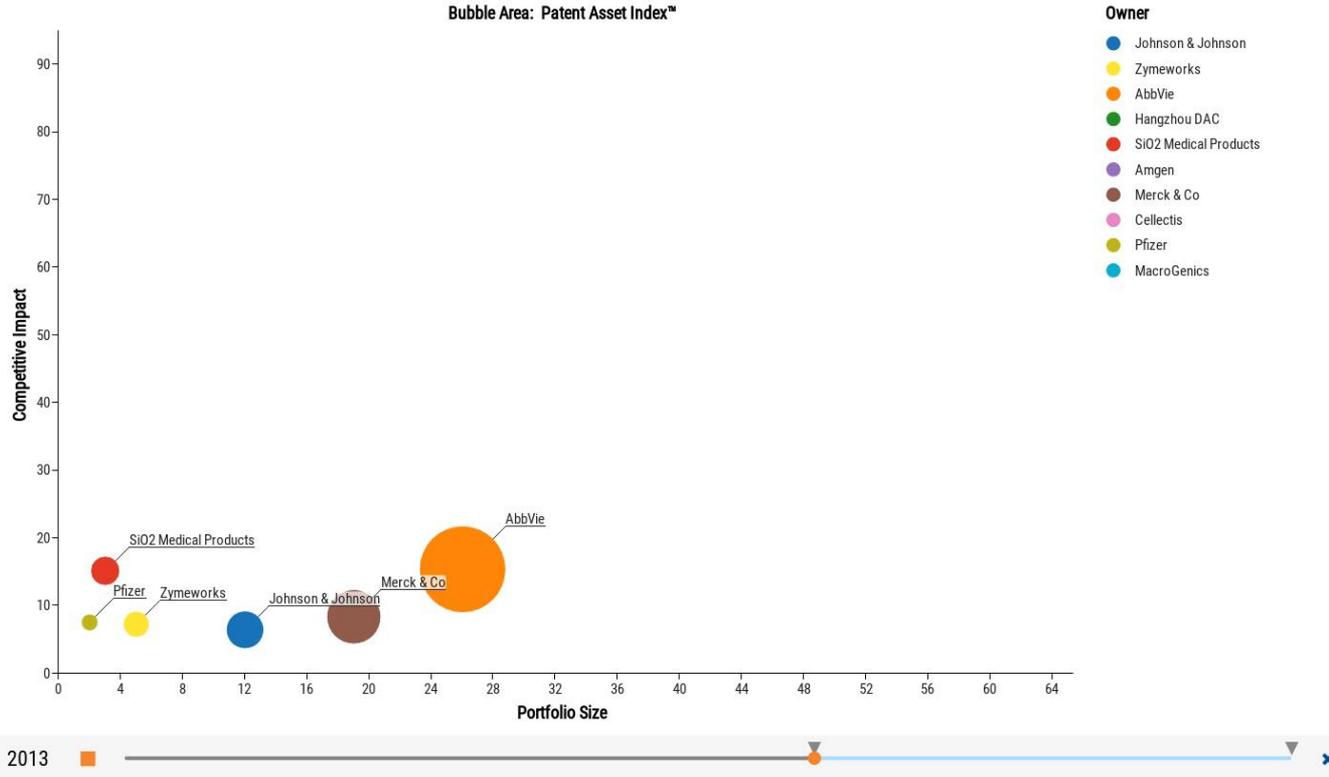
PAI Trend



Portfolio Size Trend



Company's Strategy in Stelara Market



J&J Patent List for Stelara

Stelara Ustekinumab Anti-IL-12/IL23 Anti-IL12/IL23 Select Sorted by CI ↓

- Human anti-IL-23 antibodies, compositions, methods and uses** 2006
 A human anti-IL-23p19 antibody, including isolated nucleic acids that enc...
 Johnson & Johnson EP1971366.A2
- Anti-IL-23 antibodies, compositions, methods and uses** 2006
 An anti-IL-23p19 antibody, including isolated nucleic acids that encode at ...
 Johnson & Johnson EP1896073.A2
- Safe and effective method of treating ulcerative colitis with anti-IL12/IL23** 2019
 Described are methods and compositions for clinical proven safe and effe...
 Johnson & Johnson EP3883606.A1
- Methods of continuous cell culture** 2019
 The present disclosure provides, among other things, continuous culture ...
 Johnson & Johnson EP3846924.A1
- Accessory for an injection device including a pivotable cover** 2018
 An accessory for an injection device having a needle cap. The accessory c...
 Johnson & Johnson EP3873570.A1
- Accessory for an injection device including a grip for a needle cap** 2018
 An accessory for an injection device having a needle cap. The accessory c...
 Johnson & Johnson EP3873571.A1
- Accessory for an injection device including a pivotable cover** 2018
 An accessory for an injection device having a safety shield and at least on...
 Johnson & Johnson EP3873572.A1
- Methods and compositions for prediction of response to a therapy of an** 2019
 Biomarkers that are indicative of the response to the therapy of the inflam...
 Johnson & Johnson EP3880836.A1
- Safe and effective method of treating psoriasis with anti-IL-23 specific a.** 2019
 A method of treating psoriasis in a patient by administering an IL-23 speci...
 Johnson & Johnson EP3883607.A2
- Safe and effective method of treating lupus with anti-IL12/IL23 antibody** 2019
 A method of treating active Systemic Lupus Erythematosus (SLE) in a pati...
 Johnson & Johnson EP3897722.A1

[Click here to tag patents...](#)

Family of EP1971366.A2 et al.

Human anti-IL-23 antibodies, compositions, methods and uses

Johnson & Johnson

First filing in family 12/28/2006
First publication in family 7/5/2007

Inventors Benson Jacqueline, Cunningham Mark, Jaqueline Benson, Jill M Carton, Mark Clunningham, Orlovsky Yevg, ...
Applicants Benson Jacqueline, Carton Jill, Centocor Ortho Biotech Inc, Cunningham Mark, Janssen Biotech Inc, Orlovs, ...

Family members (114)

Document #	Title	Publication date	Legal status
EP1971366.A2	Human anti-IL-23 antibodies, compositions, methods and uses	9/24/2008	Nationalized E
AU2006330411.A1	Human anti-IL-23 antibodies, compositions, methods and uses	7/5/2007	In force E
AU2006330411.B2	Human anti-IL-23 antibodies, compositions, methods and uses	7/12/2012	In force E
AU2012238198.A1	Human anti-IL-23 antibodies, compositions, methods and uses	10/25/2012	Inactive E
EP1971366.A2	Human anti-IL-23 antibodies, compositions, methods and uses	7/10/2015	In force E

Indicators

Indicator	Value	Table...
Competitive Impact (CI)	21.7	Yellow bar
Market Coverage (MC)	3.4	Green bar
Technology Relevance (TR)	6.4	Blue bar

Legal status today

Status	Countries
In force	AT, AU, BE, BG, BR, CA, CH, CN, CY, CZ, DE, DK, EA, EE, ES, FI, ...
Nationalized	EP
Pending	-

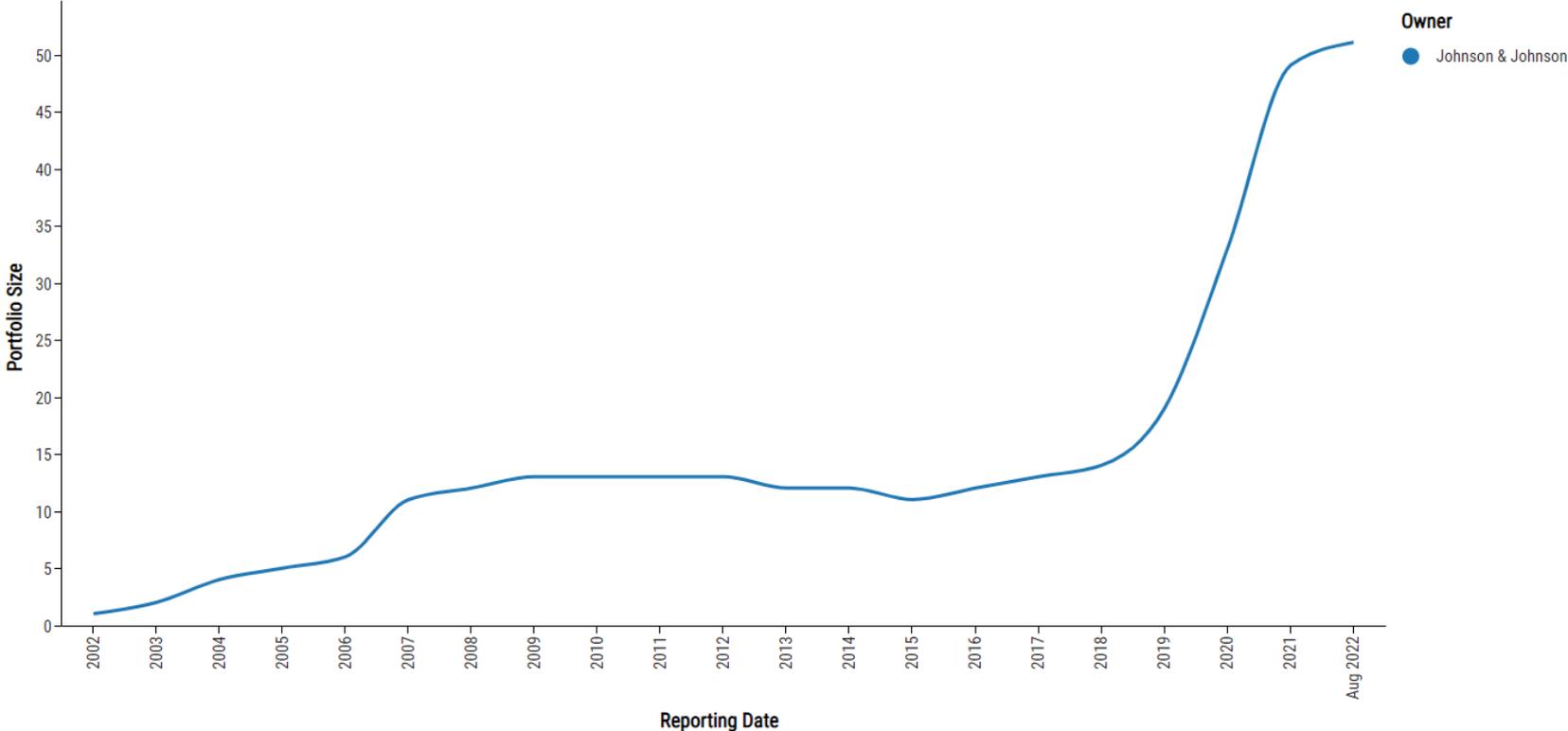
Prior art (160)

Company	Filed	PAI
Roche	1983-2003	602.1
City of Hope	1983	368.6
Takeda Pharma	1991-1995	177.8
UCB Belgium	1986-1994	61.8
Merck & Co	1998-2006	20.4

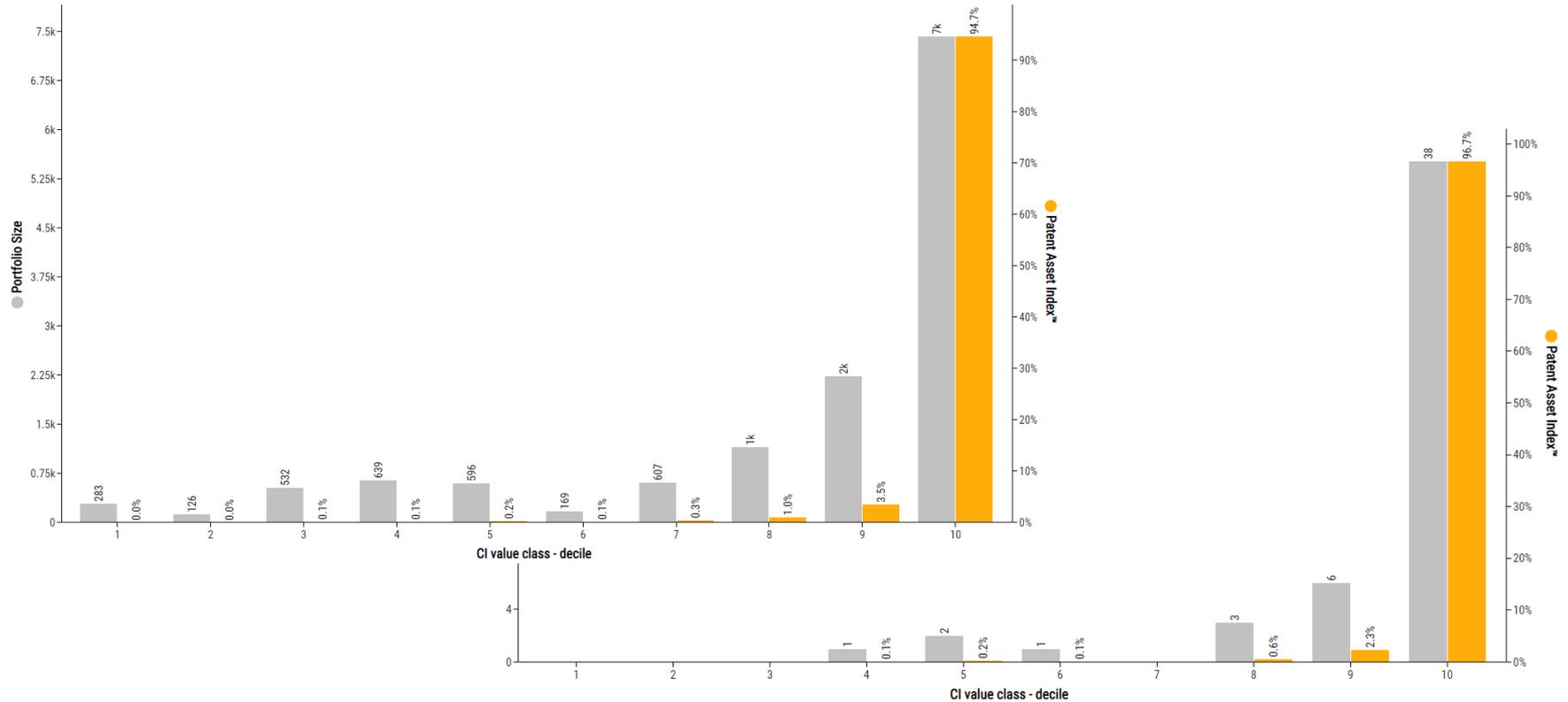
Subsequent art (76)

Company	Filed	PAI
Roche	2009-2017	233.0
Chugai Pharmaceutical (in: Roche)	2009-2017	233.0
Johnson & Johnson	2006-2019	59.5
Merck & Co	2000-2013	57.7
Baehringer Ingelheim	2011-2017	44.0

J&J's R&D trend for Stelara



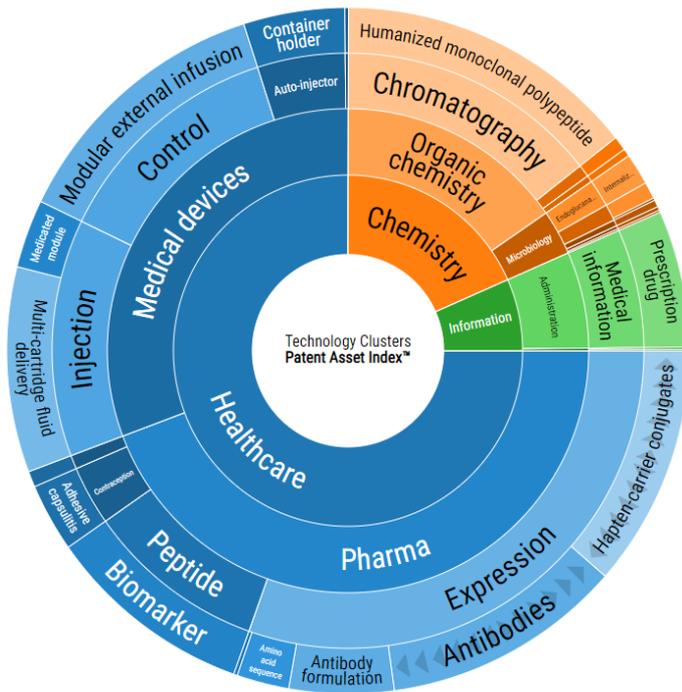
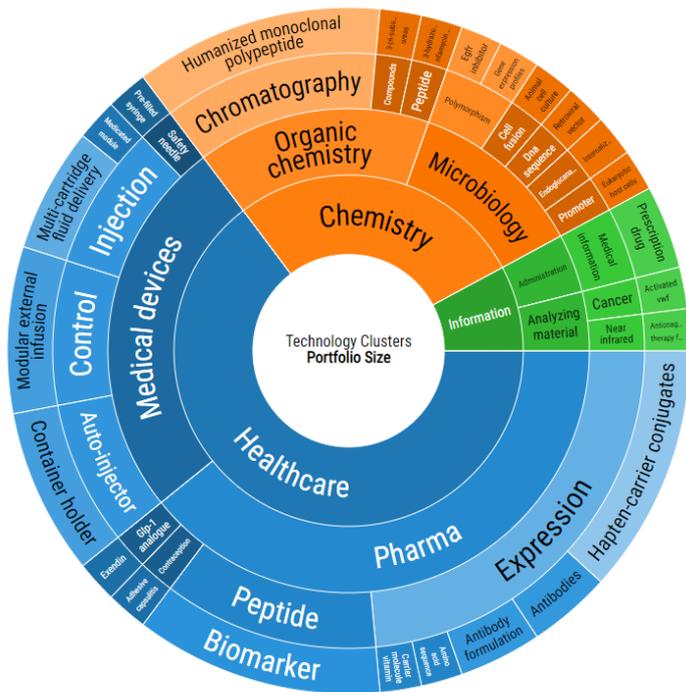
J&J's Portfolio Value Distribution (feat. Stelara)



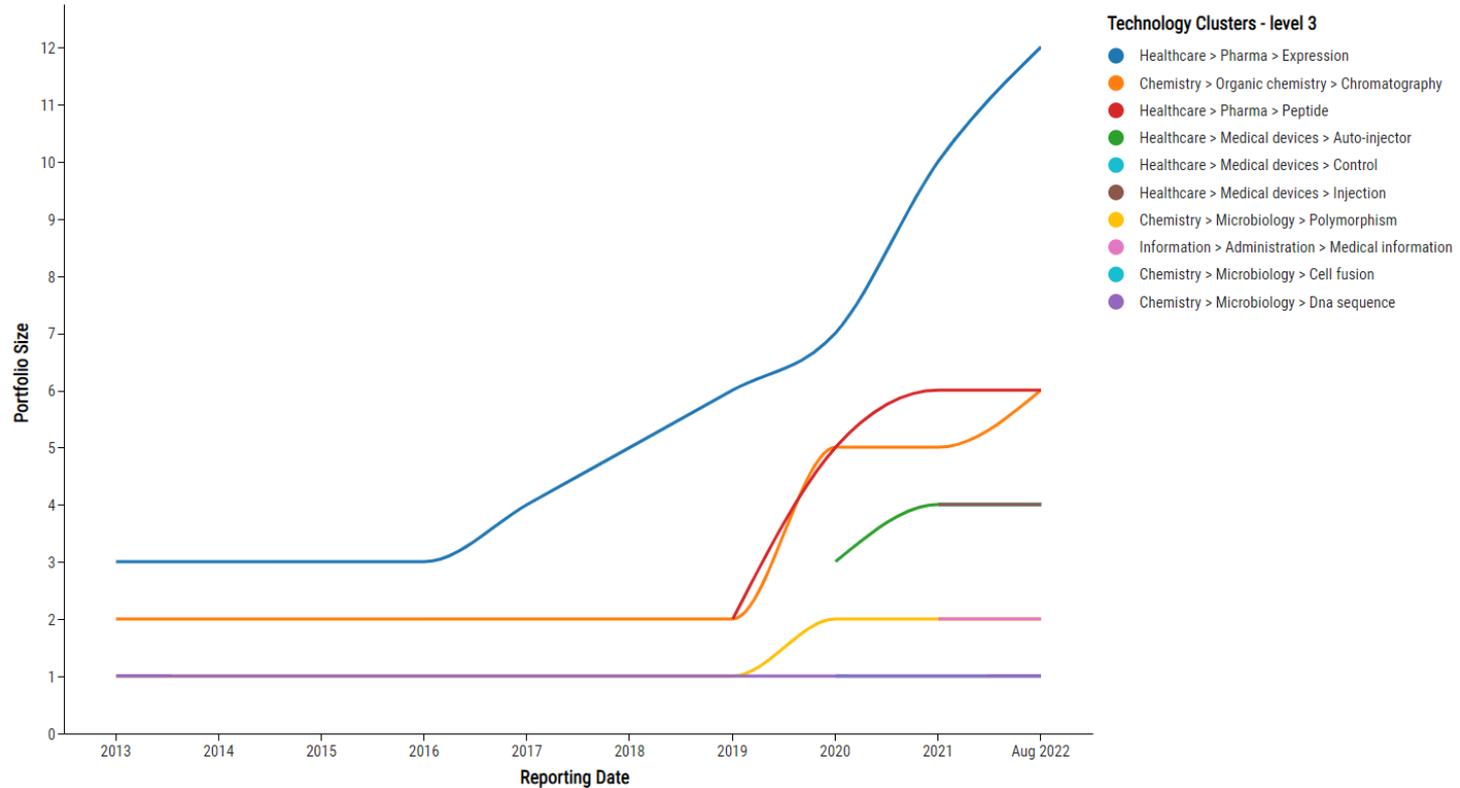
J&J's Stelara Technology Segment

Portfolio Size

PAI



J&J's Trend in Stelara Technology Segment



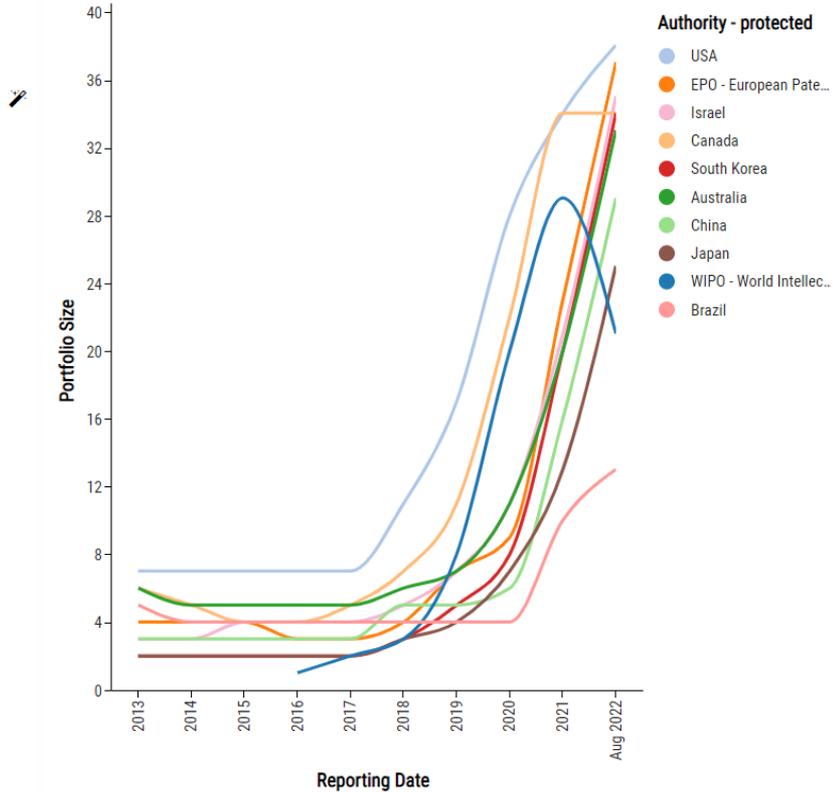
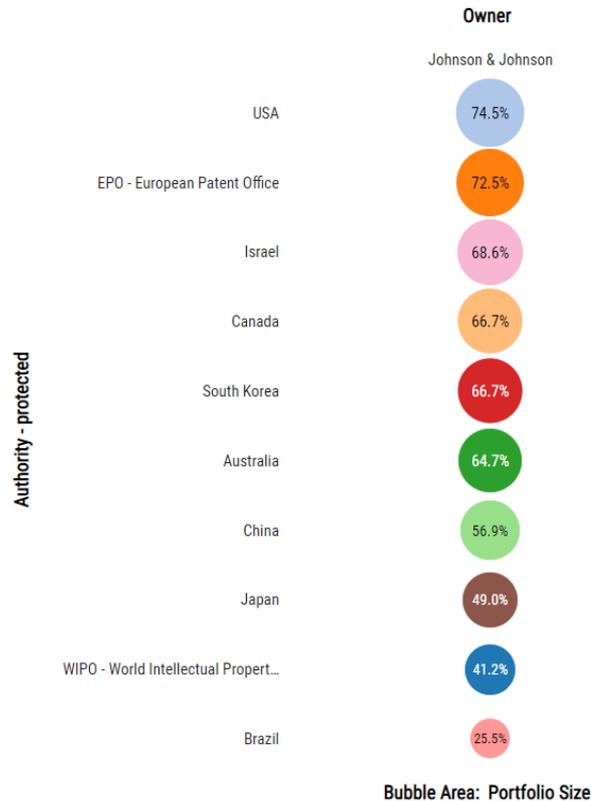
J&J's Stelara Technology Competitiveness

✓ Technology Clusters - level 4	Patent Asset Index™	Portfolio Size	Competitive Impact	Technology Relevance	Market Coverage	Recent Technology R...	Share of External Tec...
1 Hapten-carrier conjugates	118	12	9.8	4.6	2.2	5.1	38.4%
2 Biomarker	87	13	6.7	3.3	2.0	1.7	16.7%
3 Humanized monoclonal polypeptide	74	8	9.2	3.8	2.1	2.4	78.9%
4 Modular external infusion	54	4	13.5	4.8	2.8	2.9	50.0%
5 Antibodies	45	4	11.2	3.9	2.9	1.0	29.2%
6 Immunoglobulin	43	6	7.1	3.4	1.7	4.4	45.0%
7 Multi-cartridge fluid delivery	40	3	13.5	4.8	2.8	1.6	100.0%
8 Monoclonal antibody	39	3	12.8	4.2	2.5	5.0	85.9%
9 Prescription drug	27	2	13.5	4.8	2.8	2.5	0.0%
10 Antibody formulation	27	2	13.5	4.8	2.8	0.7	50.0%
11 Insulin derivative	27	2	13.5	4.8	2.8	0.5	50.0%
12 Xanthine derivative	21	4	5.3	2.1	2.4	1.8	57.4%
13 Container holder	20	4	5.0	1.9	2.4	1.2	100.0%
14 5-aminoimidazole-4-carboxamide ortho...	19	2	9.4	3.1	3.0	5.3	72.1%
15 Liquid pharmaceutical composition	17	3	5.5	2.3	1.9	0.4	50.0%
16 Viral core proteins	14	2	7.2	2.7	2.3	0.2	0.0%
17 Polynucleotide encoding	13	1	13.5	4.8	2.8	0.2	50.0%
18 Medicated module	13	1	13.5	4.8	2.8	0.5	50.0%
19 Adhesive capsulitis	13	1	13.5	4.8	2.8	0.5	50.0%
20 Acid sequences	13	1	13.5	4.8	2.8	0.5	50.0%

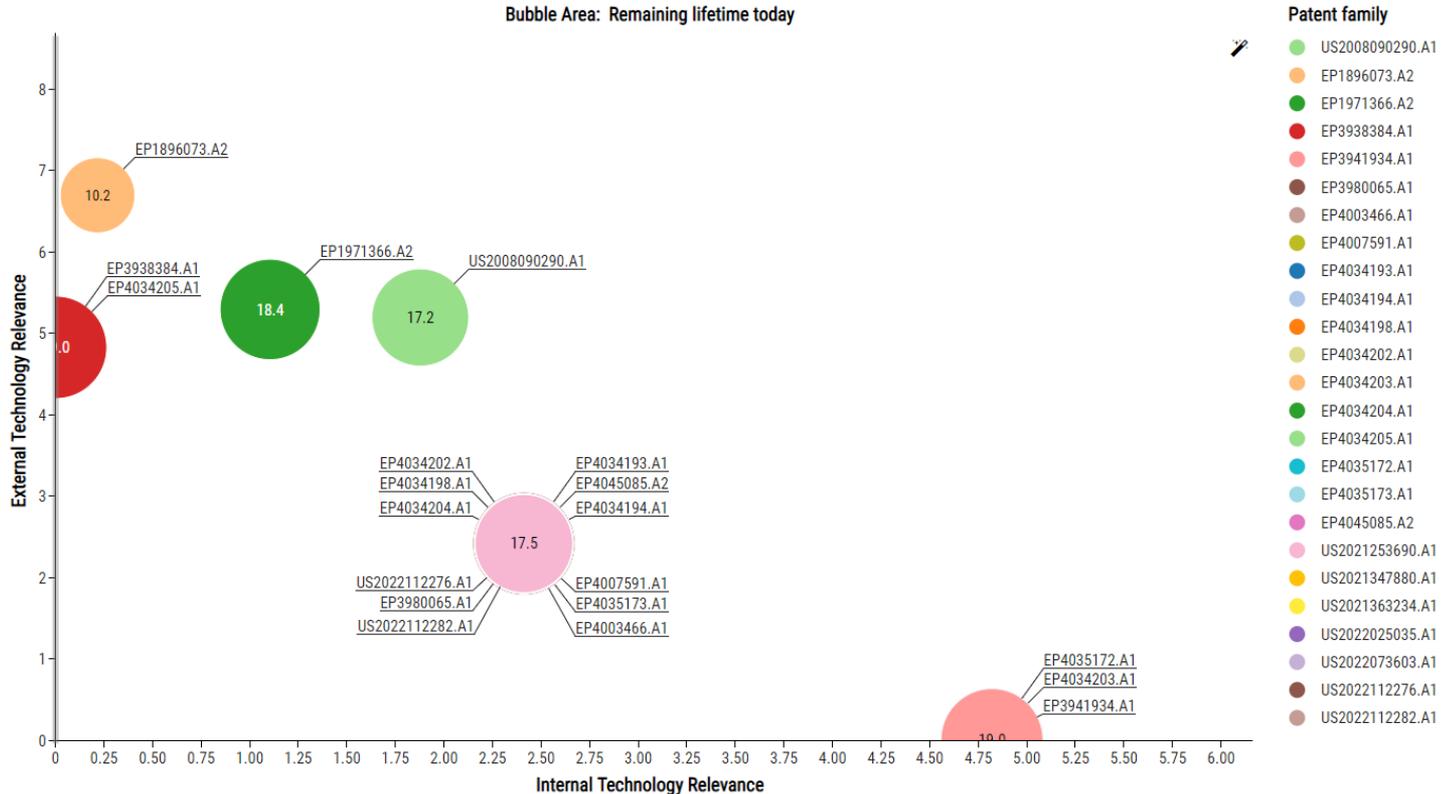
J&J's Stelara Patent Details w/ Termination Date

✓ Patent family	Filing year	Title	Abstract	Current owners	Legal Status	Active authorities (today)	Remaining lifetime today	Citing companies
1 AR099899.A1	2015	Antibodies fragments and anti-view	The present invention relates to antibodies that bind to fragments and an arrester www.biodiv.org/decision...	Johnson & Johnson More...	Pending	AR		12.6 <none> More...
2 EP1623011.A2	2004	IL-23p40 SPECIFIC IMMUNOGLOBULIN DERIVED PROTEINS, COMPOSITIONS, MET...	Novel anti-IL-23p40 specific human Ig derived proteins, including, without limitation, antibodies, fusion protein...	Johnson & Johnson More...	In force	CH, DE, FR, GB, IE, IL, NL, US		3.2 Amgen Biora Therapeutics More...
3 EP1819359.A2	2005	Anti-integrin immunoconjugates, methods and uses	The invention relates to conjugates of anti-integrin specific antibodies with cytotoxic compounds, the synthesis, ...	ImmunoGen Johnson & Johnson More...	In force	JP, MX, UA, ZA		4.8 AstraZeneca Bayer More...
4 EP1839120.A2	2005	Anti-il-12 antibody based vectors, host cells, and methods of production and uses	Antibody expression vectors and plasmids can incorporate various antibody gene portions for transcript...	Johnson & Johnson More...	In force	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LV, MC, NL, PL, PT, ...		4.1 Boehringer Ingelheim Johnson & Johnson More...
5 EP1896073.A2	2006	Anti-il-23 antibodies, compositions, methods and uses	An anti-IL-23p19 antibody, including isolated nucleic acids that encode at least one anti-IL-23p19 antibody, vec...	Johnson & Johnson More...	In force	AT, AU, BE, BG, BR, CA, CH, CN, CY, CZ, DE, DK, EE, EP, ES, FI, FR, GB, GR, HU, IE, IL, IS, IT, LT, LU...		10.2 AbbVie Amgen More...
6 EP1971366.A2	2006	Human anti-il-23 antibodies, compositions, methods and uses	A human anti-IL-23p19 antibody, including isolated nucleic acids that encode at least one anti-IL-23p19 an...	Johnson & Johnson More...	In force	AT, AU, BE, BG, BR, CA, CH, CN, CY, CZ, DE, DK, EA, EE, EP, ES, FI, FR, GB, GR, HU, IE, IL, IS, IT, JP...		18.4 Ablynx (in: Sanofi) Amgen More...
7 EP2315780.A1	2009	Compositions and methods of use for therapeutic antibodies	The present invention relates to antibodies that specifically bind to the BAFF receptor (BAFFR). The inventi...	Johnson & Johnson Novartis More...	In force	AR, AT, AU, BE, BG, BR, CA, CH, CN, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, IE, IL, IS, IT, JO...		12.6 Boehringer Ingelheim Dana-Farber More...
8 EP2470556.A1	2010	Il-17 binding compounds and medical uses thereof	The present invention relates to new IL-17 inhibiting polypeptides, corresponding fusion proteins, comp...	Johnson & Johnson More...	In force	CH, DE, FR, GB, JP, MX, RU, US		8.0 4TEEN4 PHARMACE... ADRENOMED AG More...
9 EP2710029.A1	2011	New chymase binding compounds and medical uses thereof	The present invention relates to a polypeptide binding to a chymase (EC 3.4.21.39), wherein the polypeptide ...	Johnson & Johnson More...	In force	CH, DE, FR, GB, JP, US		9.7 Johnson & Johnson More...
10 EP2872163.A1	2012	Novel il-17a binding molecules and medical uses thereof	The present invention relates to a polypeptide inhibiting the activity of glycosylated IL-17A, wherein the pol...	Johnson & Johnson More...	In force	AU, CA, CH, CL, CN, CR, DE, ES, FR, GB, IE, IT, JP, NL, PH, SE, US		12.6 Hanmi Pharm Johnson & Johnson More...
11 EP2909189.A1	2013	HETEROARYL LINKED QUINOLINYL MODULATORS OF RORyt	The present invention comprises compounds of Formula I. wherein: R1, R2, R3, R4, R5, R6, R7, R8, and R9 are ...	Johnson & Johnson More...	In force	CA, DE, ES, FR, GB, IT, JP, US		11.1 Lead Pharma ANGION BIOMEDICA More...
12 EP2909192.A1	2013	Methylene linked quinolinyl modulators of ror-gamma-t	The present invention comprises compounds of Formula I. wherein: R1, R2, R3, R4, R5, R6, R7, R8, and R9 are ...	Johnson & Johnson More...	In force	AL, AT, AU, BE, BG, CA, CH, CL, CN, CR, CY, CZ, DE, DK, EA, EC, EE, ES, FI, FR, GB, GR, GT, HK, ...		12.7 Boehringer Ingelheim Johnson & Johnson More...

J&J's Stelara Market Strategy



J&J's Stelara Patents with internal/external citation



J&J's Annuity Fee for Stelara

<input type="checkbox"/> <input checked="" type="checkbox"/> Annuity fee payment year	Annuity fee (\$)	<input type="checkbox"/> <input checked="" type="checkbox"/> Annuity fee payment in	Annuity fee (\$)
<input type="checkbox"/> 1 2022	99,667	<input type="checkbox"/> 1 South Korea	1,137,118
<input type="checkbox"/> 2 2023	241,122	<input type="checkbox"/> 2 EPO - European Patent Office	999,228
<input type="checkbox"/> 3 2024	206,078	<input type="checkbox"/> 3 USA	640,400
<input type="checkbox"/> 4 2025	200,641	<input type="checkbox"/> 4 China	393,721
<input type="checkbox"/> 5 2026	143,143	<input type="checkbox"/> 5 Japan	390,989
<input type="checkbox"/> 6 2027	168,970	<input type="checkbox"/> 6 Australia	278,681
<input type="checkbox"/> 7 2028	191,116	<input type="checkbox"/> 7 Canada	135,486
<input type="checkbox"/> 8 2029	216,010	<input type="checkbox"/> 8 Germany	75,655
<input type="checkbox"/> 9 2030	221,512	<input type="checkbox"/> 9 Brazil	60,922
<input type="checkbox"/> 10 2031	270,966	<input type="checkbox"/> 10 United Kingdom	55,508
<input type="checkbox"/> 11 2032	327,504	<input type="checkbox"/> 11 Switzerland	44,747
<input type="checkbox"/> 12 2033	332,853	<input type="checkbox"/> 12 Taiwan	42,246
<input type="checkbox"/> 13 2034	328,063	<input type="checkbox"/> 13 Denmark	41,115
<input type="checkbox"/> 14 2035	427,531	<input type="checkbox"/> 14 Netherlands	34,802
<input type="checkbox"/> 15 2036	401,020	<input type="checkbox"/> 15 Austria	24,942
<input type="checkbox"/> 16 2037	317,271	<input type="checkbox"/> 16 Ireland	22,844
<input type="checkbox"/> 17 2038	278,440	<input type="checkbox"/> 17 Spain	19,395
<input type="checkbox"/> 18 2039	200,695	<input type="checkbox"/> 18 France	18,794
<input type="checkbox"/> 19 2040	10,570	<input type="checkbox"/> 19 Italy	18,087
<input type="checkbox"/> 20 2041	4,251	<input type="checkbox"/> 20 Sweden	18,074
		<input type="checkbox"/> 21 Greece	15,926
		<input type="checkbox"/> 22 Belgium	13,950
		<input type="checkbox"/> 23 Finland	13,700
		<input type="checkbox"/> 24 Bulgaria	12,212

THANK YOU



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