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Proteon Therapeutics Inc

CORTELLIS COMPANY DETAILED PIPELINE REPORT

A comprehensive coverage of the the company's drug pipeline portfolio including detailed product records.

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THOMSON REUTERS
3 Times Square
New York, New York 10036
United States

Tel: +1 646 223 4000

thomsonreuters.com

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ABOUT CORTELLIS COMPANY DETAILED PIPELINE REPORT

Thomson Reuters provides the knowledge, tools, and expertise to help support drug discovery and development activities, IP portfolio optimization, identification of licensing and partnering opportunities, delivery of successful regulatory submissions, and the ability to keep current with the rapidly-changing pharmaceutical and chemical markets, supporting informed, early decisions.

This report was created by Thomson Reuters, using information from *Thomson Reuters Cortellis™ for Competitive Intelligence*; a comprehensive, proven intelligence solution that leverages the most accurate, complete, and widely respected drug pipeline information.From drug discovery and development activities to patent reports, the latest deals, and partnering opportunities, *Cortellis* can provide the confidence to make the most informed business decisions, faster. *Cortellis for Competitive Intelligence* provides accurateand validated information on pharmaceutical and biotechnology companies globally, their drug pipelines, deals, patents, and clinical trials, plus breaking industry news and conference coverage. All contained in one simple, highly intuitive research platform.

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GLOSSARY

Number of Drugs in Active Development

Number of drugs associated with the company or subsidiary that are currently in active development, i.e. the development status for the drug(s) is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

Number of Inactive Drugs

Number of drugs associated with the company or subsidiary that are currently classified as inactive, i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.

Number of Patents as Owner

Number of patents associated with the company where the company is listed as owner; i.e. the relationship type (or way the patent refers to the company) is: Patent Assignee/Owner, Patent owner (not assignee), Licensee for development and marketing, Licensee – marketing only (Distributor), Patent assignee of family member, Inferred assignee.

Number of Patents as Third Party

Number of patents associated with the company where the company is listed as third party; i.e. the relationship type (or way the patent refers to the company) is: Patent assignee (not owner), Ex-Licensee for development and marketing, Ex-Licensee marketing only (Distributor), Customer of technology, Ex-Customer of technology, Patent opponent or infringer, Affiliate organization of inventor, Owner of underlying technology.

Patents summary table

This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

Number of Deals

A count of deals where the company or one of its subsidiaries is the primary company.

Key Indications

Displays top ten key indications for the company and its subsidiaries based on frequency (indications occurring with high and identical frequency are always included, and this may result in more than ten Key Indications being listed). Includes both indications associated with patents where the company is patent owner and indications associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

Key Target-based Actions

Displays top ten key target-based actions for the company and its subsidiaries based on frequency (actions occurring with high and identical frequency are always included, and this may result in more than ten Key Target-based Actions being listed). Includes both target-based actions associated with patents where the company patent owner and target-based actions associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended. A target-based action is one that is associated with a target.

Key Technologies

Displays top ten key technologies for the company and its subsidiaries based on frequency (technologies occurring with high and identical frequency are always included, and this may result in more than ten Key Technologies being listed). Includes both key technologies associated with patents where the company relationship is patent owner and key technologies associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

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Proteon Therapeutics Inc

COMPANY OVERVIEW

Company Name	Proteon Therapeutics Inc
Parent Company Name	Proteon Therapeutics Inc
Website	http://www.proteontherapeutics.com/
Country	US
Number of Drugs in Active Development	1
Number of Inactive Drugs	0
Number of Patents as Owner	3
Number of Patents as Third Party	0
Number of Deals	2
Key Indications	Kidney dialysis,Peripheral vascular disease,Cardiovascular disease,Renal disease,Vasospasm
Key Target-based Actions	Elastase stimulator,Elastase modulator
Key Technologies	Biological therapeutic,Local formulation unspecified,Recombinant enzyme,Transdermal formulation,Biochemical synthesis,Cell culture technique,Formulation,Freeze drying,Polynucleotide sequence,Protein recombinant,Vector expression

COMPANY PROFILE

SUMMARY

Proteon Therapeutics Inc, a spin-out of Johns Hopkins University is a privately-held biopharmaceutical company that develops pharmaceuticals for renal and vascular diseases.

IP NEWS

In March 2008, Proteon announced that the EPO had issued WO-0121574 (EP-01220830) which covered the use of elastases (including PRT-201) for dilating arteries and veins.

ACQUISITIONS & SPIN-OFFS

In March 2009, Proteon entered into an agreement offering Novartis an exclusive option to acquire Proteon following the successful completion of a phase II trial of PRT-201 and a secondary right to a global license. The deal would be worth up to $550 million including an initial acquisition payment plus regulatory milestone payments.

FINANCIAL

In October 2014, the company announced an IPO of 6.11 million shares at $10.00 each that begun trading on the NASDAQ Global Market under the ticker symbol 'PRTO' from October 22, 2014. The underwriters were granted a 30-day option to purchase up to 916,500 additional shares. At that time, the offering was expected to close on October 27, 2014. In November 2014, the under writers option to purchase additional shares was closed after the closing of the IPO in October. At that time, the gross proceeds were $70.3 million including the under writers option without deduction of under writing discounts and commissions.

In May 2014, the company raised $45 million in a series D equity financing including a $25 million tranche.

In March 2009, Proteon closed a $38 million series B financing round led by MPM Capital. In May 2009, the company raised an additional $12 million from a second closing of the series B financing round.

In September 2007, Proteon raised $12 million from a financing round. The company planned to use the proceeds to fund development of PRT-201.

In March 2006, Proteon raised $19 million in a series A venture capital round to fund development of its PRT-201 vascular dilation drug.

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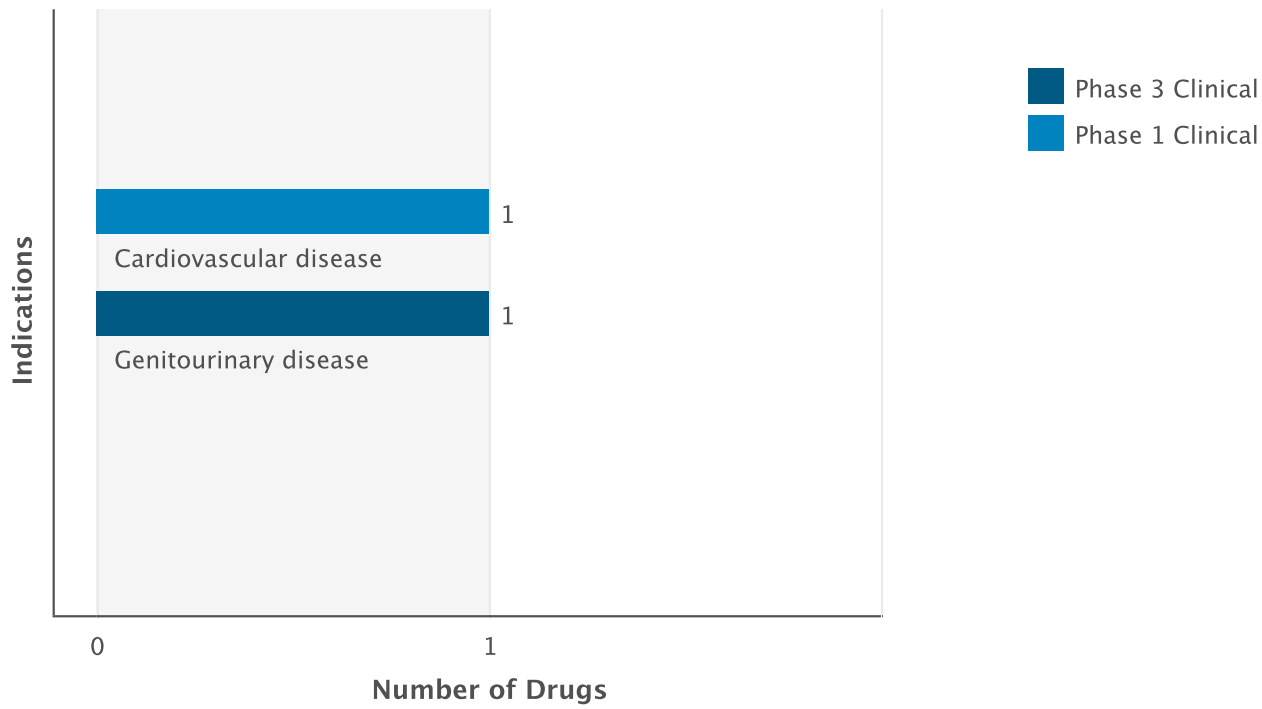
PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart



Drugs by Indication Table

Indication	Active	Inactive	Total
Cardiovascular disease	1	0	1
Genitourinary disease	1	0	1

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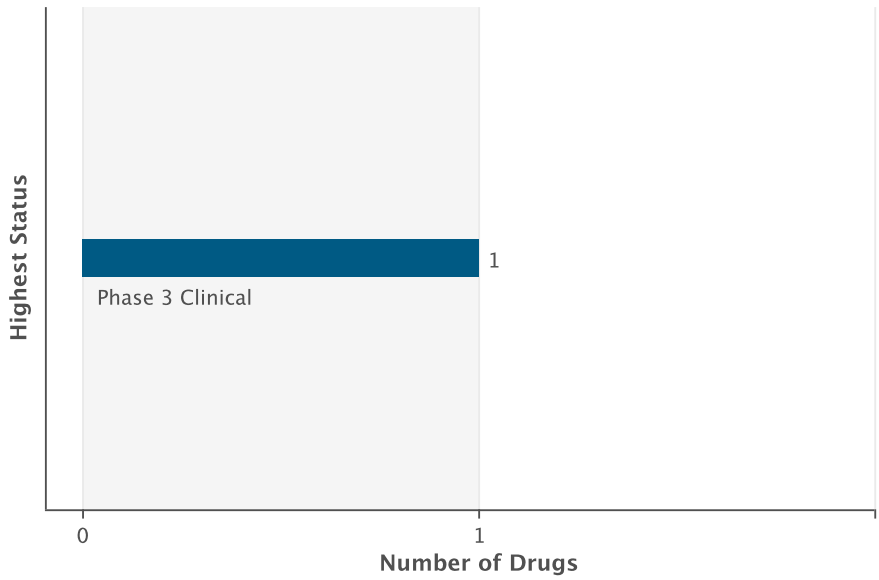
Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 3 Clinical	1

DEALS

Deal Type	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Drug - Development/Commercialization License	1	0	0	0	1
Drug - Manufacturing/Supply	0	0	1	0	1

CLINICAL TRIALS

Trials by Condition Studied

Condition Studied	Ongoing	All
Genitourinary disease	1	3
Cardiovascular disease	1	3

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Trials by Phase

Phase	Ongoing	All
Phase 3	1	1
Phase 2	0	1
Phase 1	1	3

Phase Definitions

Phase 3 Clinical
Includes Phase 3, Phase 3b, Phase 3a, Phase 2/3 (where enrolment count is 300 or over)

Phase 2 Clinical
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

Phase 1 Clinical
Includes Phase 1, Phase 1a, Phase 1, Phase 1/2 (where enrolment count is under 100 or not specified), Phase 0

PATENTS *

Indication	As Owner	As Third Party	Total
Cardiovascular disease	4	0	4
Gastrointestinal disease	1	0	1
Genitourinary disease	1	0	1

* This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

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PRODUCT PORTFOLIO DRUG PIPELINE DETAIL

PLEASE NOTE: Highest status refers to highest development of that drug for one of the active companies

vonapanitase

vonapanitase SNAPSHOT

Drug Name	vonapanitase
Key Synonyms	vonapanitase
Originator Company	Proteon Therapeutics Inc
Active Companies	Proteon Therapeutics Inc
Inactive Companies	
Highest Status	Phase 3 Clinical
Active Indications	Peripheral vascular disease;Kidney dialysis
Target-based Actions	Elastase stimulator
Other Actions	Vasodilator
Technologies	Transdermal formulation;Biological therapeutic;Local formulation unspecified;Recombinant enzyme
Last Change Date	27-Mar-2015

vonapanitase DEVELOPMENT PROFILE

SUMMARY

Proteon Therapeutics is developing vonapanitase (PRT-201, PROT-201), a recombinant human type I pancreatic elastase produced in Pichia pastoris, for local topical use as a vasodilator to modify the extracellular matrix to potentially improve outcomes from hemodialysis and peripheral artery disease (PAD),,,. In July 2014, the first patient was treated in a phase III trial in patients, immediately after radiocephalic arteriovenous fistula (AVF) creation with chronic kidney disease (CKD). In March 2015, data from the trial were expected to be reported in the first quarter of 2017. At that time, the company intends to initiate second AVF phase III trial by June 2015 ; later that month, the company expected to initiate the enrollment in the second quarter of 2015 . In October 2012, a phase I study was initiated in patients with PAD ; in January 2015, data were expected to be reported in the second half of 2015.

vonapanitase DEVELOPMENT STATUS

CURRENT DEVELOPMENT STATUS

Company	Indication	Country	Development Status	Date
Proteon Therapeutics Inc	Kidney dialysis	US	Phase 3 Clinical	17-Jul-2014
Proteon Therapeutics Inc	Peripheral vascular disease	US	Phase 1 Clinical	15-Oct-2012
Proteon Therapeutics Inc	Kidney dialysis	EU	Discovery	05-Nov-2013

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vonapanitase DRUG NAMES

Names	Type
PRT-201	Research Code
vasodilation agent (vascular surgery, hemodialysis), Proteon	
vonapanitase	USAN, PINN
PROT-201	Research Code

vonapanitase CLINICAL TRIALS

Trials by Phase and Condition Studied

Phase 4 Clinical		Phase 3 Clinical		Phase 2 Clinical		Phase 1 Clinical		Phase Unspecified		Total	
On-going	All	On-going	All	On-going	All	On-going	All	On-going	All	On-going	All
Peripheral arterial occlusive disease											
0	0	0	0	0	1	0	1	0	0	0	2
Renal disease											
0	0	0	0	0	0	0	2	0	0	0	2
Peripheral vascular disease											
0	0	0	0	0	0	1	1	0	0	1	1
End stage renal disease											
0	0	1	1	0	0	0	0	0	0	1	1

Total Trials by Phase and Status

Phase 4 Clinical		Phase 3 Clinical		Phase 2 Clinical		Phase 1 Clinical		Phase Unspecified		Total	
On-going	All	On-going	All	On-going	All	On-going	All	On-going	All	On-going	All
Total by Phase and Status											
0	0	1	1	0	1	1	3	0	0	2	5

Phase Definitions

Phase 3 Clinical
Includes Phase 3, Phase 3b, Phase 3a, Phase 2/3 (where enrolment count is 300 or over)

Phase 2 Clinical
Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

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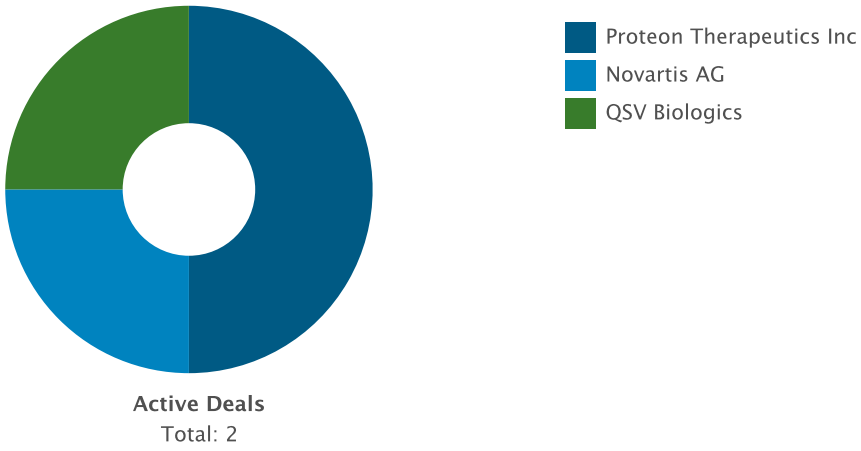
Phase 1 Clinical
Includes Phase 1, Phase 1a, Phase 1, Phase 1/2 (where enrolment count is under 100 or not specified), Phase 0

vonapanitase DEALS AND PATENTS

DEALS

Deals by Parent Company Chart



Deals by Parent Company Table

Company Name	Principal		Partner		Total
	Active	Inactive	Active	Inactive	
Proteon Therapeutics Inc	1	0	1	0	2
Novartis AG	0	0	1	0	1
QSV Biologics	1	0	0	0	1

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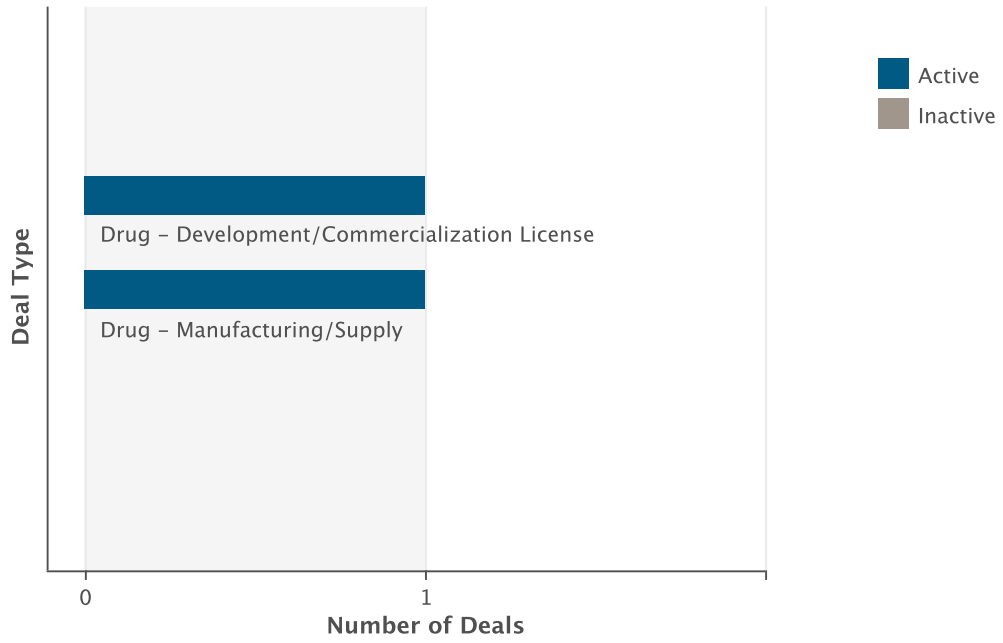
Deals by Type Chart



Deals by Type Table

Deal Type	Active	Inactive	Total
Drug - Manufacturing/Supply	1	0	1
Drug - Development/Commercialization License	1	0	1

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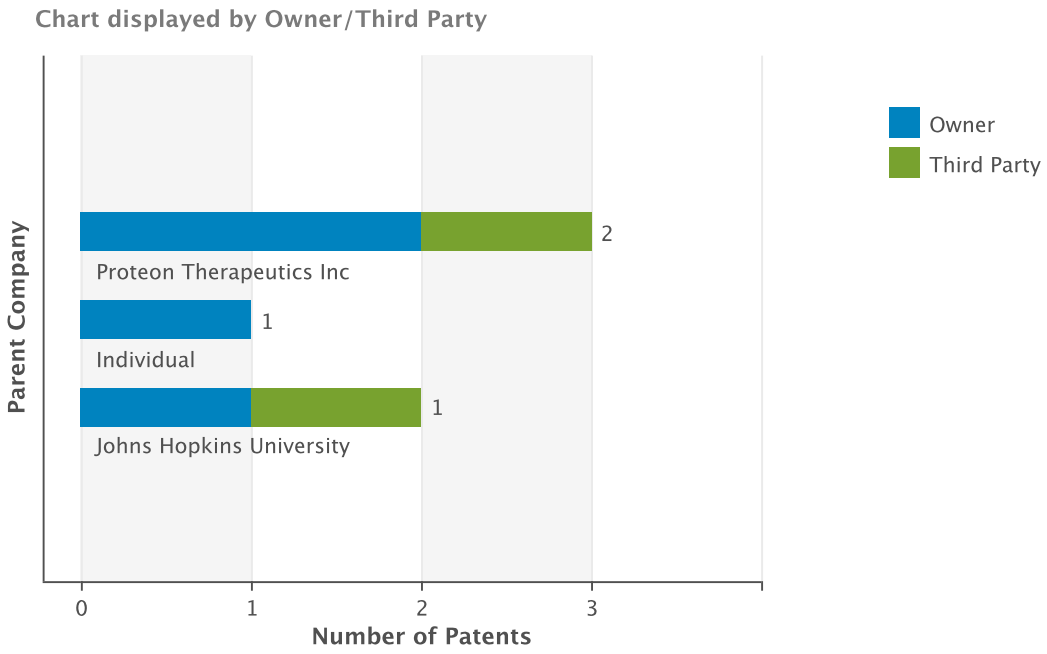
PATENTS

Patents by Parent Company Chart



Patents by Parent Company Table

Company Name	As Owner	As Third Party	Total
Proteon Therapeutics Inc	2	1	2
Johns Hopkins University	1	1	1
Individual	1	0	1

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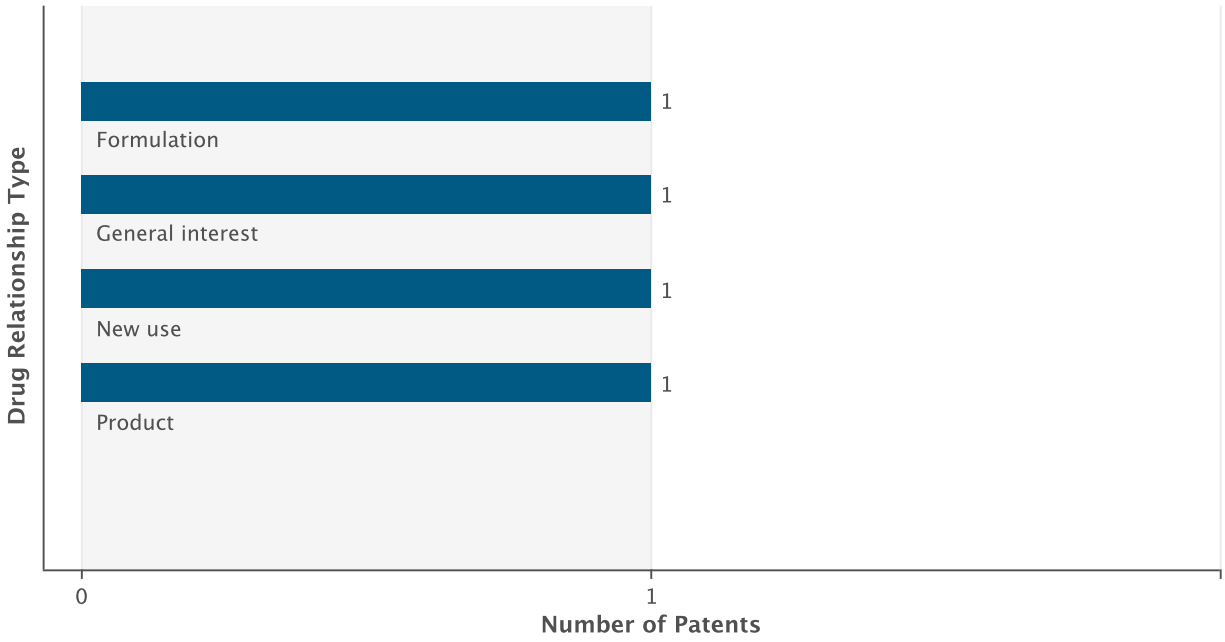
Patents by Drug Relationship Type Chart



Patents by Drug Relationship Type Table

Drug Relationship	Total
Product	1
Formulation	1
New use	1
General interest	1

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