

Task Force on Repurposing of Drugs (TFORD) for COVID-19

Patent status in India: by GNANLEX

Interferon-Beta

A. Active patents

S.no.	Title	Assignee	Application details	Type of patent	Remarks
1	Method for delivering Interferon β	Biogen MA INC.	App no/ Grant no: IN 261198/5307/DELNP/2007 Priority date: 11/01/2006 Grant date: Expected expiry date: 11/01/2026 Form 27: Not been manufactured in India, the patentee is contemplating an opportunity to work the patent in India.	Device (Avonex pen) Method of storing Interferon Beta in the said device	Interferon β 1(a) as such has not been claimed in IN 261198. This patent is likely to be a barrier only in terms of the device used for IFN beta administration
2	Process for the preparation of glycosylated interferon beta	Ares Trading S.A.	Indian Pat. App no: 1517/DELNP/2008 Grant no: IN 272565 Filing/Priority date: 21/02/2008 Grant date: 08/04/2016 Expected expiry date: 26/08/2025 Form 27: Not yet worked in India	Process & Product patent for glycosylated interferon beta	No Patent Barrier

B. Pending applications

S.no.	Title	Assignee	Application details	Type of patent	Remarks
1.	Method for reducing flu like symptoms associated with intramuscular administration of interferon using a fast titration escalating dosing regimen	Biogen MA INC.	App no: 8915/DELNP/2013 Filing date/Priority date: 15/03/2012 Status: Reply to FER filed on 27/02/2019	Product, a <i>titration package</i> for intramuscular administration of interferon β-1a	No patent barrier, Patent watch is recommended.
2.	Method for producing soluble recombinant interferon protein without denaturing	Pfenex Inc.	App no: 7604/DELNP/2012 Filing date: 02/03/2011 Status: Reply to FER filed on 26/10/2018, presently awaiting further communication from the IPO	Process	No patent barrier
3	A process for the purification of recombinant	Stelis Biopharma Private	App no: IN201641026646 Filing date: 04/08/2016 Status: Deadline for filing	Process	No patent barrier

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	proteins	Limited	request for examination expires on 04/08/2020		
4	A lyophilised pharmaceutical formulation and its use	Faron Pharmaceuticals	App no: 201847036223 Filing date: 28/02/2017 Status: Deadline for filing request for examination expires on 04/08/2020	IFN-beta formulation	No patent barrier

C. Expired/Lapsed applications

S.no.	Title	Assignee	Application details	Type of patent	Remarks
1	Intranasal formulations of interferon beta free of stabilizers that are proteins or polypeptides	Nastech Pharmaceutical Company Inc.	App no: 7041/DELNP/2006 Filing date: 23/11/2006 Status: abandoned under section 21(1)	Product claims [HSA-free liquid pharmaceutical composition]	No patent barrier
2	Stabilized Interferon Liquid Formulation	Ares Trading S.A.,	App no: 6968/DELNP/2006 Priority date: 27/05/2005 Status: abandoned under section 21(1)	Product claims	No patent barrier
3	Hydrogel Interferon Formulations	Ares Trading S.A.	App no: 6465/DELNP/2006 Filing date: 13/05/2005 Status: abandoned under section 21(1)	Product claims	No patent barrier
4	Stabilized Pharmaceutical Compositions Of Interferon	Wockhardt Ltd	App no: 2533/MUM/2007 Filing date/Priority date: 24/12/2007 Status: Application refused u/S 15	Product claims Pharmaceutical Composition of interferon β	No patent barrier
5	Recombinant interferon-beta with enhanced biological activity	Novartis AG	App no: 538/DELNP/2009 Filing date: 22/01/2009 Priority date: PCT/US2007/016722 dated 24/07/2007 Status: appears to be have been withdrawn u/S 11B(4)	Product claims human interferon-β protein analog	No patent barrier
6	Purification of recombinantly produced interferon	Merck Sharp & Dohme Corp.	App no: 3779/CHENP/2011 Filing date: 01/06/2011 Status: Application abandoned under Section 21(1)	Process claims	No patent barrier
7	Controlled release interferon drug products and treatment of HCV	Biolex therapeutics, inc.,	App no: 1082/DELNP/2010 Filing date: 17/02/2010	Controlled release formulation	No patent barrier

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	infection using same		Status: appears to have been abandoned u/S 21(1)		
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Disclaimer

Search results are up to 11th April 2020

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