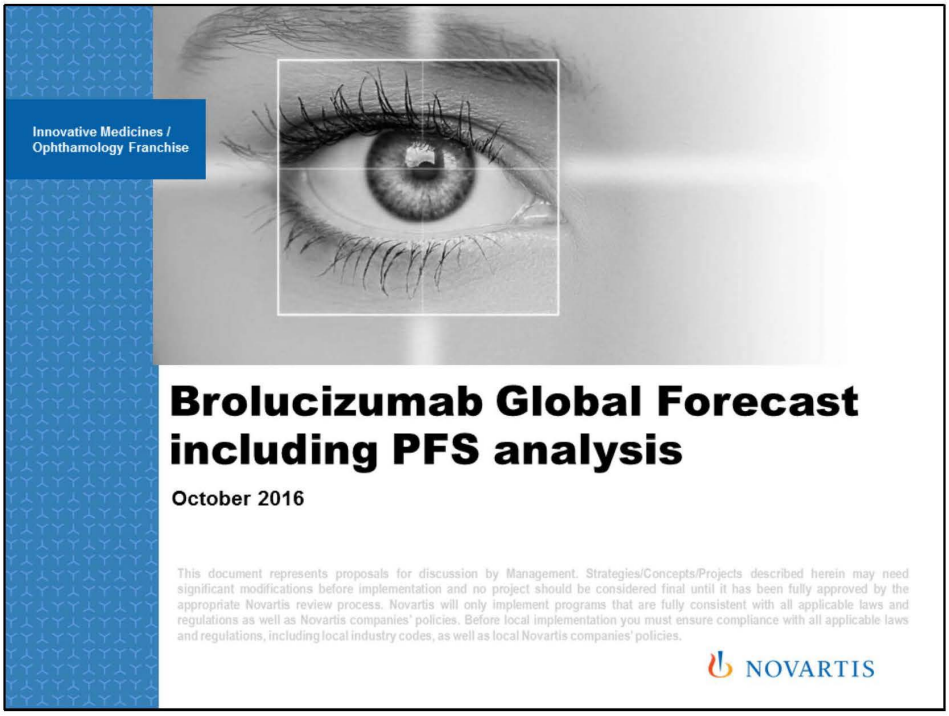
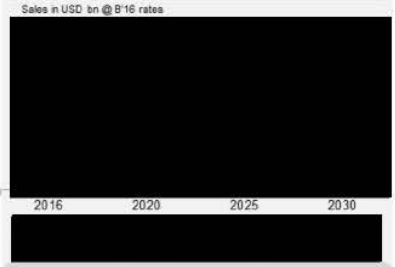


nAMD market to grow at [redacted] to [redacted] by 2030

NVTS well positioned to realize growth opportunity amidst intensifying competition

nAMD Market Size

Sales in USD bn @ B'16 rates



[redacted]

Competitive Landscape

[redacted]

The Opportunity

- Strong unmet need for **treatments that allow for longer time intervals between injections**[1,2]
- Majority of US physicians (82%) consider **SRF and IRF recurrence as major indicator of recurrent wAMD**[2]
- Majority of US physicians (59%) believe that **switching anti-VEGF** agents **make an impact on VA**[2]

NVS Retina Portfolio

- Brolucizumab, a **next generation anti-VEGF,** expected to have comparable efficacy and longer interval between inj. vs. Eylea
- **Brolucizumab is the first truly global anti-VEGF from NVS** presenting an opportunity to enter the US market
- **Brolucizumab launches** into a **highly competitive market where differentiation is key;** the product launches slightly ahead of ranibizumab LoE (in most markets) and potentially at the same time as DARPins; **Investment required to drive differentiation and attain Share of Voice to capture patient share**

Source: 1. Age-related Macular Degeneration, FirstWord Therapy Trends, June 2016; 2. ASRS 2016 PAT Survey

Ophthamology Franchise

NOVARTIS

In a competitive market, PFS and edge in dosing regimen could differentiate brolucizumab

Key differentiation point vs. SoC

BASE CASE	Brolucizumab	Lucentis SOC	Eylea	Abicipar pegol	Combination Txs
Indications	nAMD (2020e) DME (2021e)	nAMD; DME; RVO mCNV; Rare ME/CNV (2017e) & ROP (2020e)	nAMD; DME; RVO; mCNV Pursuing DR	nAMD (2020e) DME (2021e)	nAMD & DME
Compound	aVEGF	aVEGF	aVEGF	aVEGF DARPin	aVEGF & ANG2 (REGN 910-3)
Target pop.	Same as SoC	nAMD – all comers DME: with VI ex-US, all for US	As SOC	As SOC	All excl. diabetic patients with nAMD
Efficacy (BCVA)	Equivalent to SoC	+6 letters BCVA	Equivalent to SoC	Equivalent to SoC Safety signals on ocular inflammation	+60% efficacy vs. Lucentis
Dosing regimen	**nAMD:** 40% q12 + improved anatomical outcomes **DME:** q6+50% q12	q4, PRN and T&E; 37% on q12*	2q4, 2q8, T&E, PRN; 30-40% pts expected to be maintained Q16 dosing*	P3 trials seek to demonstrate 100% patients on q12	Loading / maintenance TBD
PFS	At Launch	Yes - US (10/14/16) Yes - OUS	No	No	No
Status	nAMD FIR June 2017	In market	In market	Parity with brolucizumab	~Price aVEGF+ price aPDGF-10%
Net Price** (2020)	[redacted]				

* (Lucentis) LUCAS trial; (Eylea) ARIES trial, in progress

NOVARTIS

nAMD

In the base case, Brolucizumab to contribute [redacted] overall ; [redacted] in nAMD

Key assumptions

[redacted]

Sources: 1. Brolucizumab nAMD TPP based outcome of P2 study and planned P3 studies Hawk (Apr 2016), Harrier (May 2016). 2. Regulatory team's inputs; 3. nAMD Brolucizumab TPP Qual/Quant Assessment; Clearview Jan 2016; 4. BioTrends & DRG report; 5. Abicipar Pegol TPP based on Phase II results of REACH study vs ranibizumab; 6. Biosimilar analogue analysis (GSF-C and anti TNF alpha); 7. Pricing and Market access inputs

nAMD

In US Brolucizumab expected to reac [redacted] in nAMD; ~ [redacted] n the ex US by 2025

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.