Two-year results from the Swiss cohort of a non-interventional study investigating real-world proactive dosing regimens with intravitreal aflibercept in patients with nAMD: XTEND study

Katja Hatz,[1,2] Aude Ambresin,[3] Martin Schmid,[4] Christian Prünte,[5,6] Daniel Barthelmes,[7] Tobias Machewitz,[8] Helmut Allmeier,[9] Gábor Márk Somfai[10,11]

[1]Vista Eye Clinic, Binningen, Switzerland; [2]Faculty of Medicine, University of Basel, Basel, Switzerland; [3]RétinElysée, Lausanne; Swiss Visio Montchoisi, and Swiss Visio Retina Research Center, Lausanne, Switzerland; [4]Eye Clinic, Lucerne Cantonal Hospital, and Faculty of Health Sciences and Medicine, University of Lucerne, Lucerne, Switzerland; [5]University Eye Clinic Basel, Basel, Switzerland; [6]Institute of Molecular and Clinical Ophthalmology Basel (IOB), Basel, Switzerland; [7]Department of Ophthalmology, University Hospital Zurich, Zurich, Switzerland; [8]Bayer AG, Berlin, Germany; [9]Bayer Consumer Care, AG, Basel, Switzerland; [10]Department of Ophthalmology, Stadtspital Zürich, Zürich, Switzerland; [11]Spross Research Institute, Zurich, Switzerland.

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Disclosures

Disclosures: Presenting author

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AA: Consultant for Apellis, Bayer, Novartis, and Roche; **MS:** Shareholder and board member of Oculocare, Inc.; Employee of Luzerner Spitalbetriebe AG**; CP:** Consultant for Apellis, Bayer, Novartis, Opharmic Technology, and Roche; **DB:** Consultant for Bayer, Novartis and Alcon; **TM:** Employee of Bayer AG, Berlin, Germany; **HA:** Employee of Bayer Consumer Care AG, Basel, Switzerland; **GS:** Consultant for Apellis, AbbVie, Bayer, Novartis, Roche, Carl Zeiss Meditec

Introduction

T&E is a proactive, individualized treatment regimen aiming to minimize the risk of disease recurrence whilst maintaining visual gains and reducing treatment burden associated with anti-VEGF therapy

XTEND[a] is an ongoing, 36-month, multicenter, observational, prospective study recruiting patients from 127 sites in 17 countries

The **XTEND study** is examining treatment outcomes of **real-world, proactive IVT-AFL treatment regimens** (fixed dosing or T&E) in treatment-naïve patients with nAMD in routine clinical practice

This analysis presents the **2-year results** from the **Swiss cohort of the ongoing XTEND study**

[a]Evaluation of an e**X**tended and proac**T**ive dosing regim**E**n in treatment-**N**aïve patients with neovascular age-related macular **D**egeneration. This study was initiated in May 2019 and data collection will conclude in August 2023. 36-month study plus one year of enrolment.

IVT-AFL, intravitreal aflibercept; **nAMD,** neovascular age-related macular degeneration; **T&E,** treat and extend; **VEGF,** vascular endothelial growth factor.

XTEND study design (NCT03939767): An observational, prospective study

Primary endpoint: Change in BCVA (ETDRS letters) from baseline to Month 12

Secondary endpoints include: Mean change in BCVA from baseline to Month 24; mean change in CST from baseline to Month 24; mean number of IVT-AFL injections by Month 24; maintenance of vision at Month 24

Patients were treated according to the Swiss label[a]

Treatment-naïve patients with nAMD (aged ≥50 years)

→ After three initial monthly injections, **minimum interval of 4 weeks** in Year 1

Treatment intervals could be **extended** up to a maximum of **16 weeks**

Decision to treat with an IVT-AFL proactive regimen (fixed dosing or T&E) made by the investigator prior to enrollment.

[a]Non-EMA aligned label.

BCVA, best-corrected visual acuity; **CST**, central subfield thickness; **EMA,** European Medicines Agency; **ETDRS,** Early Treatment of Diabetic Retinopathy Study.

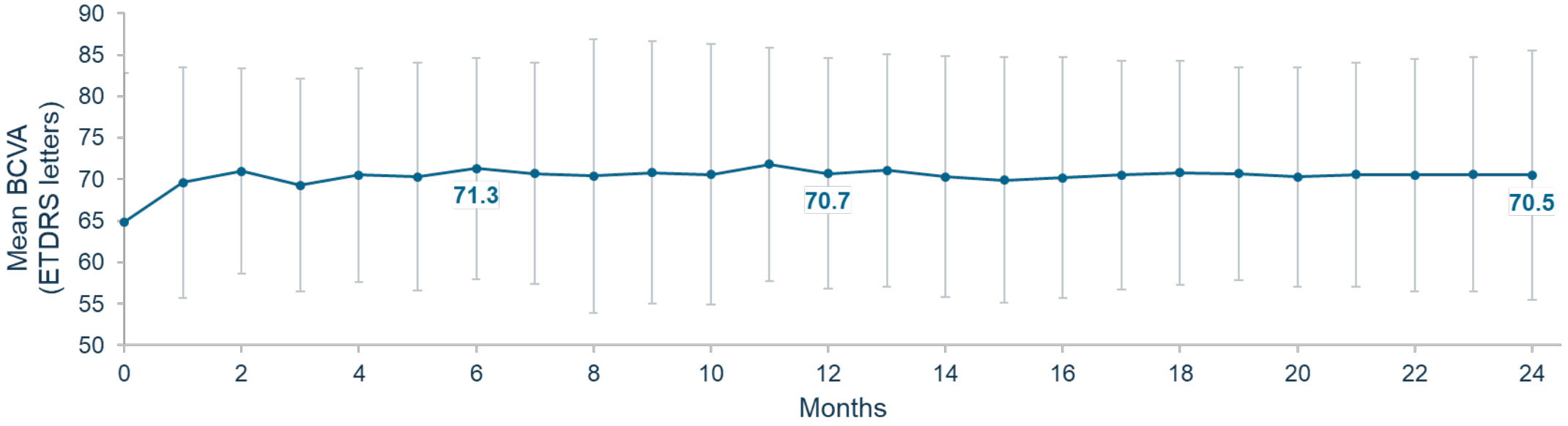
Patient baseline demographics

	XTEND Swiss Cohort (n=51)
Age, years	**79.2** ±7.4
Female, n (%)	31 (61)
Mean BVCA, ETDRS letters[a]	**64.9** ±17.9
Mean CST, µm[b]	**402** ±106
BCVA letter score category, n (%)	
<35	3 (5.9)
≥35 to <70	20 (39.2)
≥70	28 (54.9)
Primary intended treatment regimen after initial monthly injections, n (%)	
Proactive T&E	50 (98.0)
Proactive fixed treatment	1 (2.0)

Of the 54 patients enrolled in the Swiss cohort of the XTEND study, **51 patients comprised the FAS at 2 years**

FAS. Data are mean ±SD unless otherwise stated. [a]ETDRS and Snellen chart with conversion to ETDRS were recommended to measure BCVA. [b]Spectral-domain and time-domain optical coherence tomography were used to measure CST and results were interpreted at local sites.
FAS, full analysis set; **SD**, standard deviation

Change in BCVA from baseline to Month 24



	XTEND Swiss Cohort (n=51)	Global XTEND Cohort (N=1466)[a]
Baseline BCVA ±SD (EDTRS letters)	**64.9** ±17.9	**54.3** ±20.3
Mean (95% CI) change by M12	**5.7** (1.9, 9.4)	**4.3** (3.4, 5.3)
Mean (95% CI) change by M24	**5.6** (1.3, 9.8)	**2.3** (1.3, 3.3)

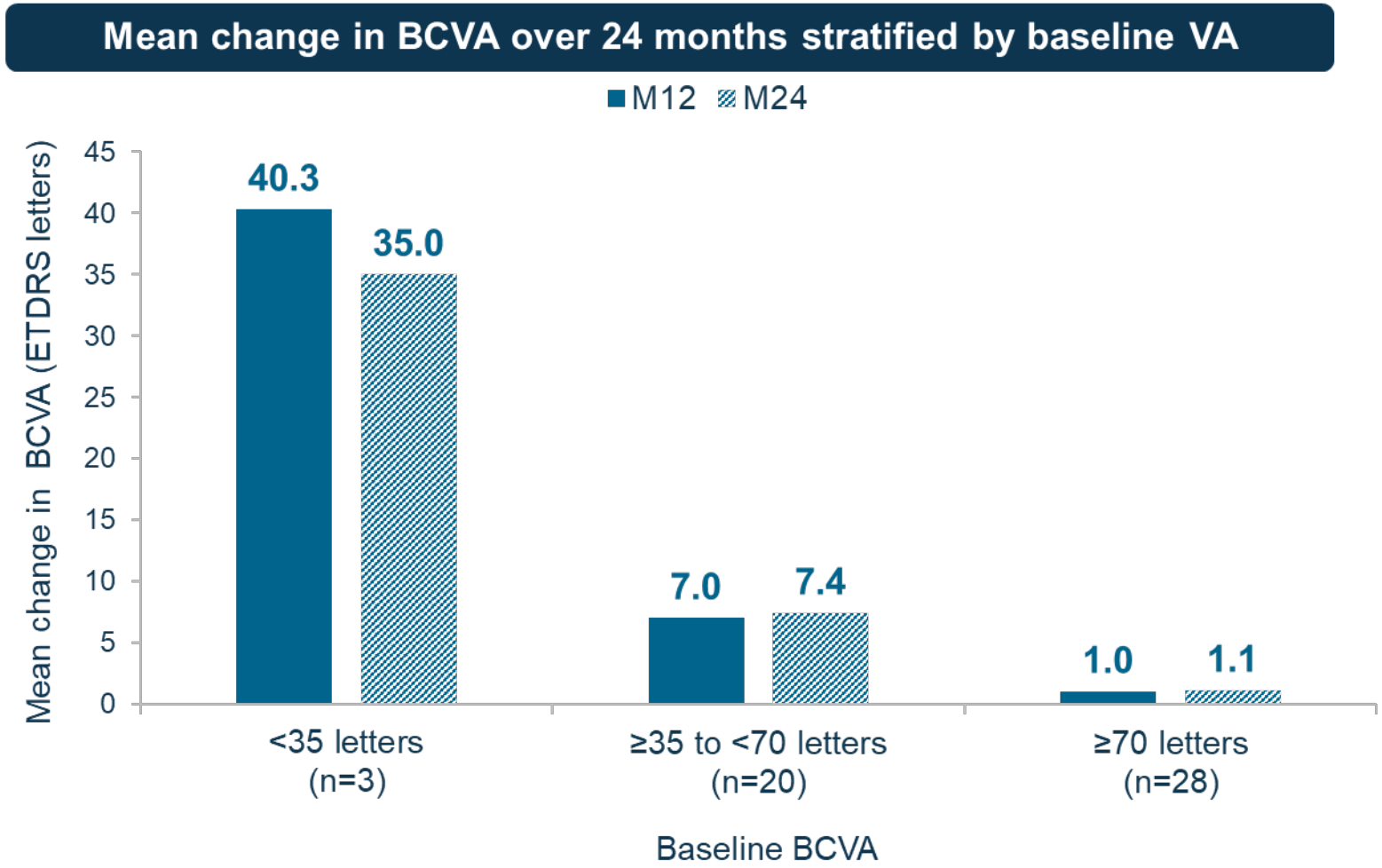
BCVA change was highest in the first 2 months and **maintained up to Month 24**

Data are for the FAS, LOCF. n=51 at baseline. Error bars denote ± SD. Values on graph based on nearest visit within ± 15 days of treatment window.
[a]The global XTEND data is comprised of a mix of patients treated with the EMA-aligned and non-EMA-aligned label
CI, confidence intervals; **LOCF**, last observation carried forward.

Visual outcomes at 24 months

Mean BCVA change at Months 12 and 24 was **highest in patients with a baseline BCVA of <35 letters**

In patients with a baseline VA of ≥70 letters, BCVA was **maintained >70 letters**



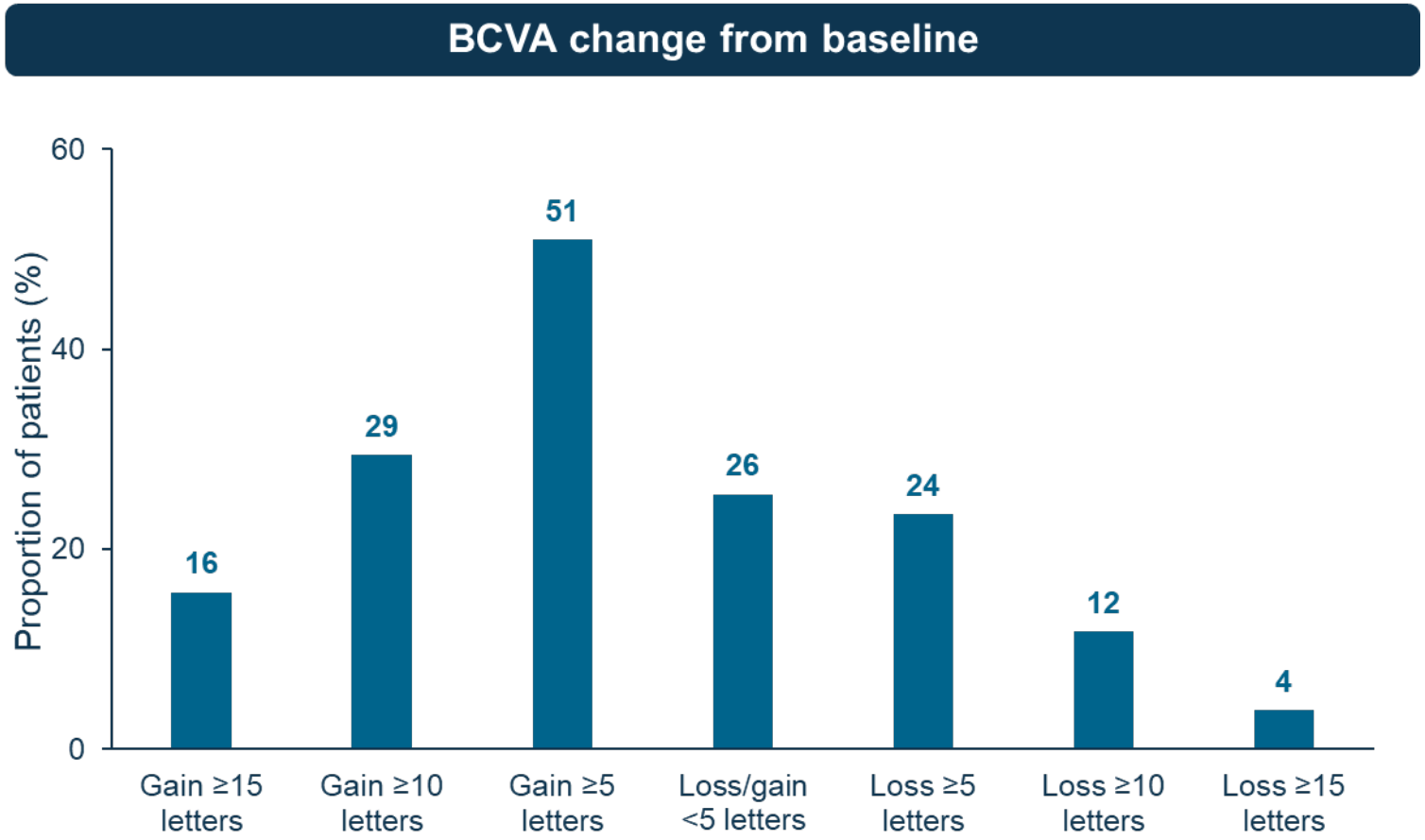
Data are for the FAS, LOCF.
VA, visual acuity.

Visual outcomes at 24 months

51% of patients **gained ≥5 letters** at 24 months

16% of patients **gained ≥15 letters** at 24 months

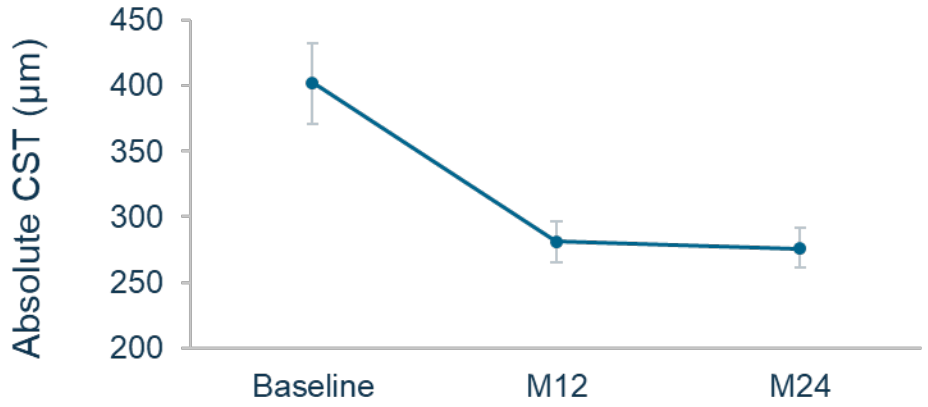
96% of patients **maintained vision (lost <15 letters)** at 24 months



Data are for the FAS, LOCF. XTEND Swiss Cohort; n=51.

Anatomic outcomes

	XTEND Swiss Cohort (n=51)
Mean CST, µm	
Baseline ±SD	**402** ±106
Change by M12 ±SD (95% CI)	**−125** ±123 (−161, −90)
Change by M24 ±SD (95% CI)	**−127** ±120 (−162, −93)



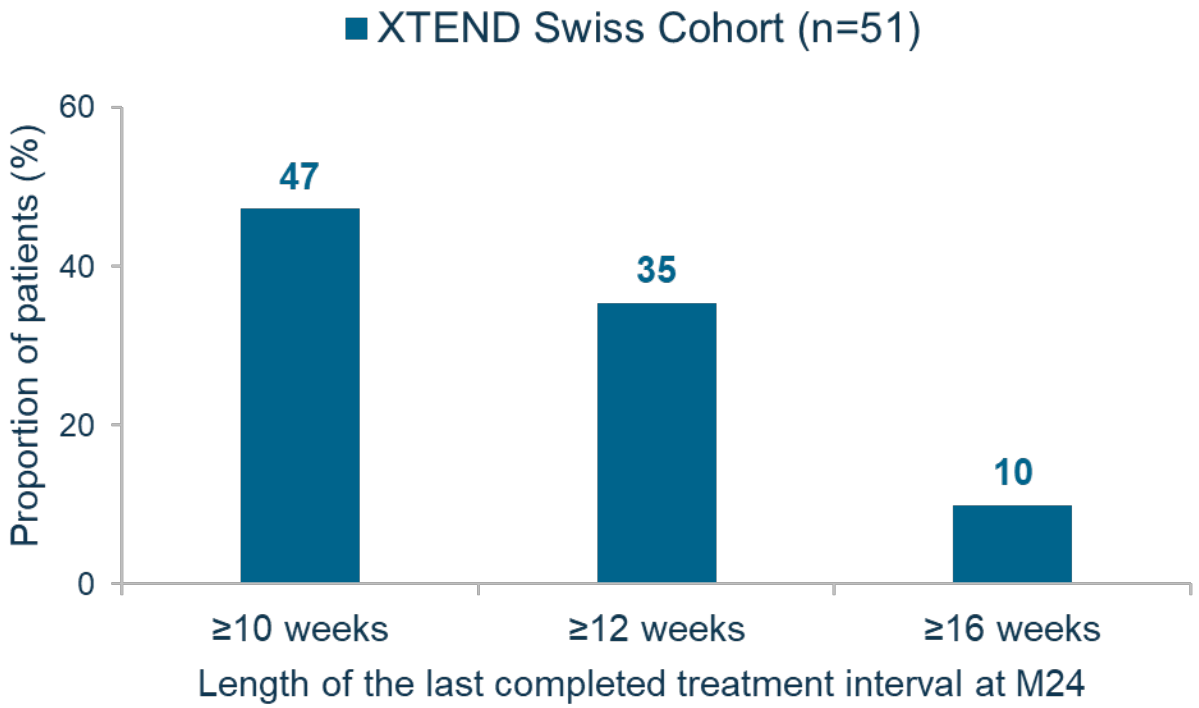
	XTEND Swiss Cohort (n=51)
SRF absent, n (%)[a]	
Baseline	10/50 (**20**)
Month 12	12/24 (**50**)
IRF absent, n (%)[a]	
Baseline	14/49 (**29**)
Month 12	12/24 (**50**)

There was a considerably **greater change from baseline in CST at M12** compared with M24

At M12, **SRF and IRF was absent in 2.5 and 1.8 fold** more patients than at baseline, respectively

Data are for the FAS, LOCF. n=51 at baseline. Error bars denote 95% CI. Proportions are calculated relative to the number of patients with assessments at the indicated time point.
[a]n values exclude patients with missing data
CST, central subfield thickness; **IRF,** intraretinal fluid; **SRF**, subretinal fluid.

Treatment exposure



Mean ±SD number of injections from baseline[a]

	XTEND Swiss Cohort (n=51)
M6	**6.5** ±1.6
M12	**9.5** ±3.2
M24	**13.7** ±6.0

Most patients (98%) were scheduled to be treated according to a T&E dosing regimen

For almost half of the patients (**47%**) in the XTEND Swiss cohort, last completed injection interval was **≥10 weeks**

The majority of IVT-AFL injections were received by M12, with a **mean of 4.2 injections received from M12 to M24** in the Swiss cohort

Mean ±SD time in study (defined as days between first injection and last visit documented) was **20.4 ±6.7 months**

[a]Injections up to 240, 420, and 780 days for 6, 12 and 24 months respectively.

Safety summary

XTEND Swiss Cohort (n=54)	Number of patients (%)
Any TEAEs	**20 (37)**
Any ocular[a]	15 (28)
Any non-ocular	9 (17)
Any ocular drug-related[b]	3 (6)
Any serious TEAEs	**5 (9)**
Any serious ocular[c]	1 (2)
Any serious non-ocular[d]	4 (7)
Any serious drug related	0

No cases of intraocular inflammation, including endophthalmitis, were reported

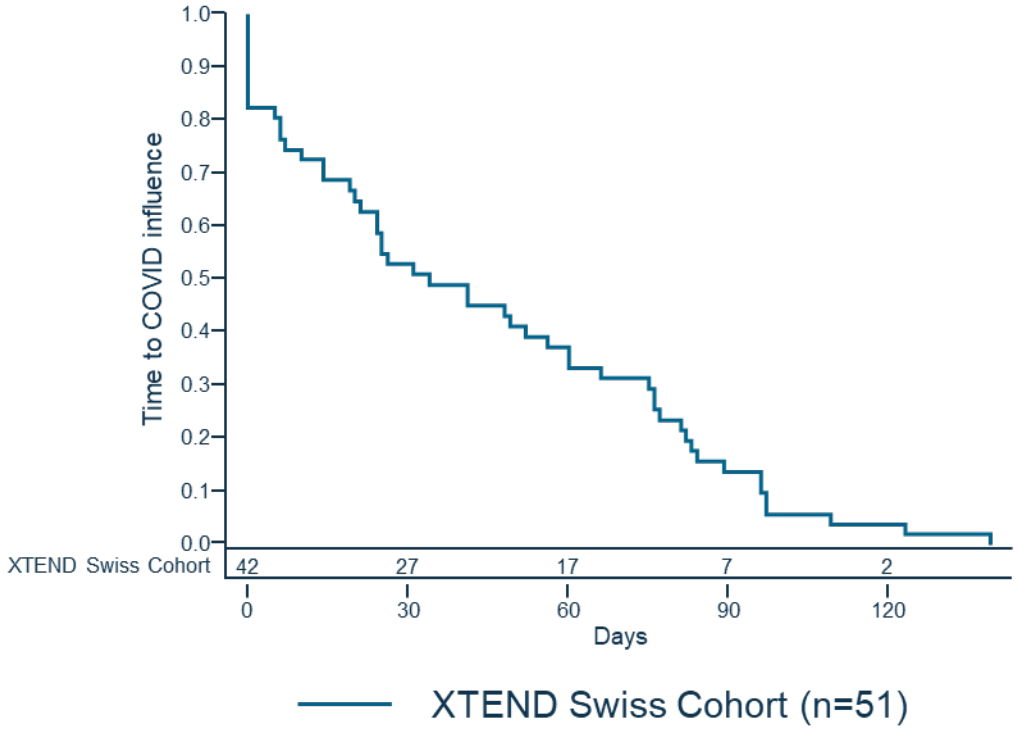
There were no new cases of subretinal hemorrhage reported

No new ocular safety concerns were identified

Table represents SAS. Ocular TEAEs in injected eyes only. [a]Ocular TEAEs in ≥2% of patients: conjunctivitis, foreign body sensation, lacrimation increase, nAMD (3 not yet coded). [b]Drug related TEAEs: punctate keratitis, visual acuity reduced, visual impairment. [c]Serious ocular TEAE: nAMD. [d]Serious non-ocular TEAEs each occurring in 1 patient each (1 not yet coded): fall, lung neoplasm malignant, pneumonia, pulmonary embolism. **TEAE,** treatment-emergent adverse event; **SAS,** safety analysis set

Impact of COVID-19

Time from enrolment to start of COVID-19 pandemic



All patients in the Swiss cohort were enrolled in the XTEND study during (or shortly before) the start of the COVID-19 pandemic

Of the 51 patients enrolled, **17** experienced at least **one delayed injection** due to the pandemic

Despite potential influences of the COVID-19 pandemic (such as delayed injections), **meaningful visual gains were achieved** in the XTEND Swiss cohort

COVID-19, Coronavirus Disease 2019.

Conclusions

Treatment-naïve patients with nAMD proactively treated IVT-AFL in Switzerland achieved **clinically relevant improvements in BCVA and CST** and **extended treatment intervals** after **24 months**

Robust functional and anatomic outcomes were achieved and maintained by Month 24, despite high baseline BCVA and potential influence of the COVID-19 pandemic. Results were **comparable to** those observed in **randomized clinical trials**

The safety profile of IVT-AFL was consistent with that observed in previous studies[1,2], and no cases of intraocular inflammation, including endophthalmitis, were reported

The study is ongoing, with the **36-month analysis** planned for 2024

1. Eter et al. *Graefe's* 2021;259(8):2213–23. **2.** Weber et al. *BMC Ophthalmol* 2020;20(1):206

Thank you to all XTEND patients and investigators

For more information, please contact:

Katja Hatz
katja.hatz@vista.ch

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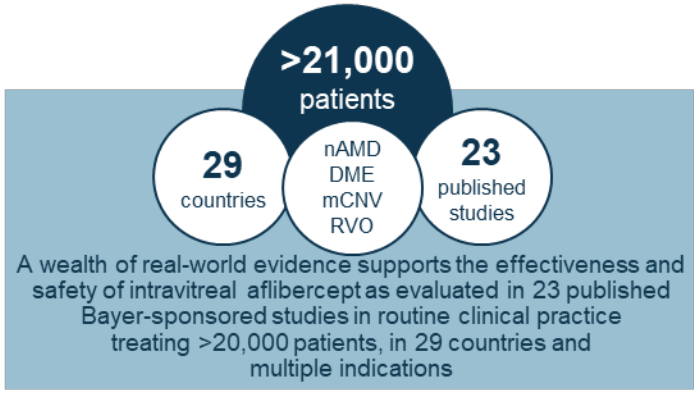

A wealth of real-world evidence supports the effectiveness and safety of intravitreal aflibercept as evaluated in 23 published Bayer-sponsored studies in routine clinical practice treating >20,000 patients, in 29 countries and multiple indications

World map showing XTEND study site countries only.