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## Background

- TRIUMPH is a prospective, 3-year observational German cohort study in ART-naïve and pre-treated adult HIV-1 infected patients (pts) with negative HLA-B\*5701 receiving Triumeq, a onepill-regimen consisting of dolutegravir/abacavir/lamivudine (DTG/ABC/3TC).
- Primary and secondary outcomes include health care resource utilization, effectiveness and safety of Triumeq use in routine clinical care.
- Results of the 2<sup>nd</sup> interim analysis are presented (data cut 27 months after last-patient-in).

## Methods

### Outcomes of interest

- Frequency and type of monitoring measures while on Triumeq
- Incidence of adverse drug reactions (ADRs)
- Persistence of Triumeq use; reasons for discontinuation
- Virological effectiveness, using on-treatment (OT) and modified intend-to-treat analyses (mITT, discontinuation=failure, loss to follow-up/missing excluded)

## Results

### Study population

N=391 pts were included in TRIUMPH between Feb. and Sep. 2015.

- Of 233 pre-treated pts, 48.1% were exposed to a protease inhibitor (PI) prior to switching to Triumeq and 19.7% had ≥3 prior regimens.

Overall characteristics	Overall (N=391)	ART-naïve (N=158, 40.4%)	Pre-treated (N=233, 59.6%)
Sex, male, n (%)	352 (90.0)	150 (94.9)	202 (86.7)
Age, years, median (IQR*)	42 (33 – 50)	37 (29 – 48)	45 (35 – 52)
CDC stage C, n (%)	61 (15.6)	8 (5.1)	53 (22.7)
HIV-1 RNA, median (IQR*)	1.7 (1.7 - 4.3)	4.4 (3.9 – 4.9)	1.7 (1.7 – 1.7)
<50 cp/mL, n (%)	---	---	197 (84.5)
≥100,000 cp/mL, n (%)	---	28 (17.7)	---
CD4 cell count, median (IQR*)	533 (368-760)	451 (282 – 597)	600 (434 – 834)
<200 cells/μL, n (%)	---	20 (12.7)	---
Presence of comorbidities, N (%)	174 (44.5)	47 (29.7)	127 (54.5)
Comorbidities in >10% of pts			
Depression**, N (%)	78 (19.9)	20 (12.7)	58 (24.9)
Hypertension**, N (%)	44 (11.3)	14 (8.9)	30 (12.8)

\*IQR, interquartile range; \*\*8.4% of the cohort received antidepressants, 11.8% antihypertensives;

### Monitoring measures

- The median number of documented visits to HIV specialists was 4.5 (IQR, 3.9 - 5.2) per patient year (PPY).
- The median rates of monitoring measures such as HIV-RNA/CD4 cell controls or blood count/serum chemistry controls were 3.8 PPY (IQR, 3.3 - 4.2) and 3.9 PPY (3.4 - 4.4), respectively. Urine tests or microbiological tests (incl. one or multiple tests) were performed 1.7 (0.0 - 3.6) and 0.8 times PPY, respectively.

Referrals to medical specialists*	% (n/N)	Median number of visits PPY** (IQR) in pts referred to specialists
Overall	61.4 (240/391)	0.9 (0.4 – 1.6)
ART-naïve	58.2 (92/158)	0.8 (0.4 – 1.6)
Pre-treated	63.5 (148/233)	1.0 (0.4 – 1.6)

\*excluding infectiologists; \*\*PPY, per patient year; individual observation times were calculated from baseline until data-cut or premature study discontinuation

### Adverse drug reactions (ADRs)

- In total, 120 events (74 ADRs, 3 SADR, 43 SAEs) were reported, resulting in an event rate of 0.14 PPY.
- 14.1% (55/391) of pts experienced 77 ADRs incl. 3 SADR (in 3 pts)
  - SADR: headache, psychiatric decompensation, and acute myocardial infarction with all 3 pts requiring hospitalization and recovering without withdrawal of Triumeq
- 84.4% of ADRs occurred in year 1, and 9.1% in year 2.

### Acknowledgments

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### Observation time and patient disposition until 2<sup>nd</sup> data cut

Median observation time was 30.0 months (IQR 27.3 - 32.2), with 73.9% (n=289/391) of pts remaining under observation; 25.3% of pts (n=99) discontinued the study (3 pts with missing information at time of data cut)..

### Reasons for study discontinuation (multiple responses permitted)

Most common reasons were stopping Triumeq\* (n=58/391, 14.8%), loss to follow-up (n=29, 7.4%) and patient decision/withdrawal of consent (n=18, 4.6%).

### \*Reasons for stopping Triumeq (multiple responses permitted)

- ADRs (adverse drug reactions; (n=27/391, 6.9%)
- Patient wish (n=27, 6.9%)
- Comorbidity/comedication (n=3, 0.8%)
- Virologic failure (n=3, 0.8%)
- Other (n=11, 2.8%)

Table 2. ADRs leading to Triumeq discontinuation (≥ 1 event per patient)

Gastrointestinal ADR, n (%)	10	(2.6)
Insomnia / sleeping disorders / fatigue, n (%)	7	(1.8)
Headache, n (%)	4	(1.0)
Dizziness, n (%)	3	(0.8)
Liver-related ADR, n (%)	2	(0.5)
Other*, n (%)	15	(3.8)

\*Increased blood glucose, paraesthesia, burning tongue, ostealgia, paresthesia in both hands, femur fracture, alopecia, cephalgia, psychological instability, anxiety disorder, mastodynia, muscle pain, mood changes and worsening of arterial hypertension

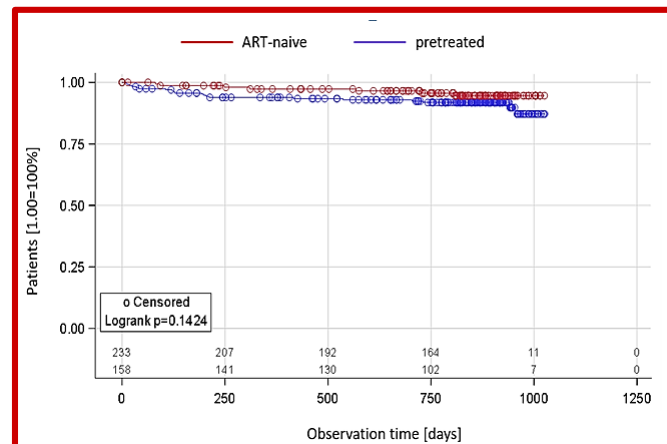


Figure 1. Time to study discontinuation due to ADR (Kaplan-Meier analysis; discontinuations for other reasons than ADRs are censored)

### Virological effectiveness

HIV-RNA was <50 cp/mL in 91.4% of pts under follow-up at 2<sup>nd</sup> data-cut in OT and in 77.2% of pts in mITT analysis (see Figure 2).

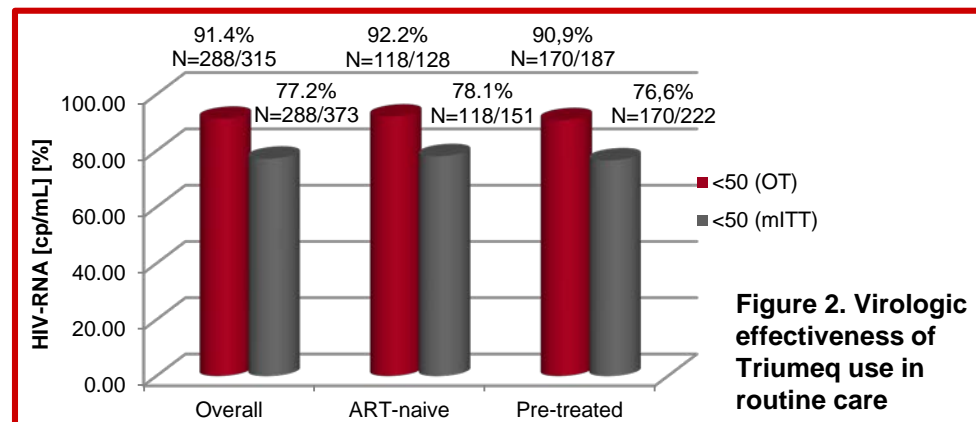


Figure 2. Virologic effectiveness of Triumeq use in routine care

## Conclusions

- The second interim analysis of the TRIUMPH cohort confirmed the high virological effectiveness of Triumeq use in real-life over a period of approximately 30 months, showing low discontinuation rates for intolerance (6.9%) and virologic failure (0.8%).
- Moreover, TRIUMPH provides insights in resource utilization in HIV care such as the need for specialist consultations in about two thirds of pts and quarterly routine visits, as recommended in local HIV treatment guidelines.