Safety and Efficacy of DTG by Age, Race and Gender: Subgroup Analysis of 96-Week Results From Treatment-Naive Patients in Phase III Trials (SPRING-2 [ING113086], SINGLE [ING114467] and FLAMINGO [ING114915])

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Introduction

- DTG once daily (QD) was well tolerated in ART-naive studies and was shown to have comparable efficacy vs RAL (SPRING-2),[1] and superior efficacy vs DRV (FLAMINGO)[2] and as a regimen with abacavir/lamivudine (ABC/3TC) QD vs Atripla® (EFV/TDF/FTC) QD (SINGLE)[3]
- Analyses of 96-week safety and efficacy data by age, race and gender subgroups were evaluated

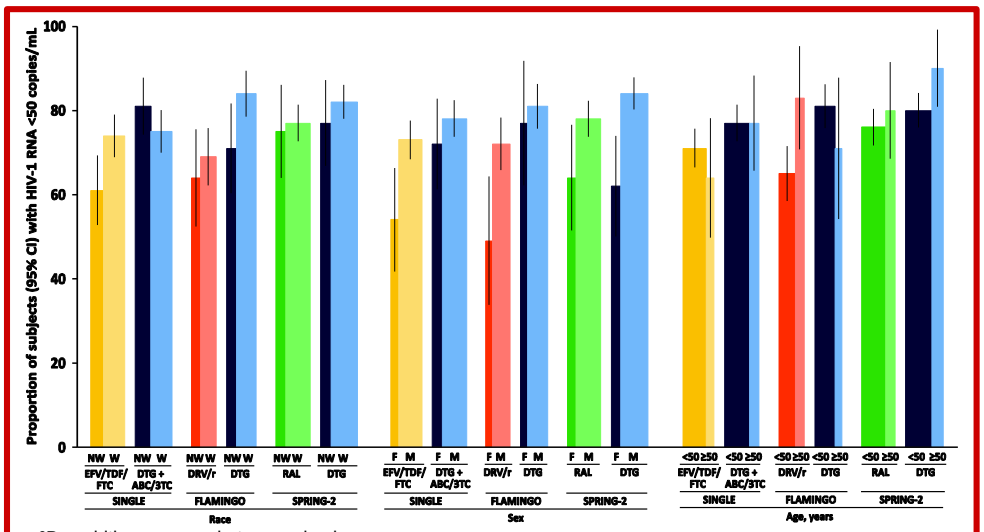
Methods

- SPRING-2 randomized subjects to DTG 50 mg QD or RAL 400 mg twice daily; FLAMINGO randomized subjects to DTG 50 mg or DRV/r QD with investigator-selected NRTIs (TDF/FTC or ABC/3TC)
- SINGLE randomized subjects to DTG 50 mg + ABC/3TC QD or EFV/TDF/FTC QD
- Response rates (by FDA snapshot) at 96 weeks and adverse events (AEs) were summarized in subgroups: age (< vs ≥50 years), race (white vs non-white) and gender (male vs female)

Results

- DTG efficacy rates at 96 weeks remained high across subgroups (Figures 1-5)
  - The efficacy of DTG QD was higher or comparable to comparator agents in subjects <50 years old, but not in the smaller cohort of subjects ≥50 years old
- Safety summaries showed comparable grade 2 to 4 drug-related AEs (Figure 5A) across subgroups and low rates of AEs leading to withdrawals across all DTG subgroups (Figure 5B)

Figure 1. Snapshot Efficacy at Week 96 by Subgroup[a]



[a]Bar width corresponds to sample size.

Figure 2. Snapshot by Visit: Subjects With Baseline CD4 Count <200 cells/mm³

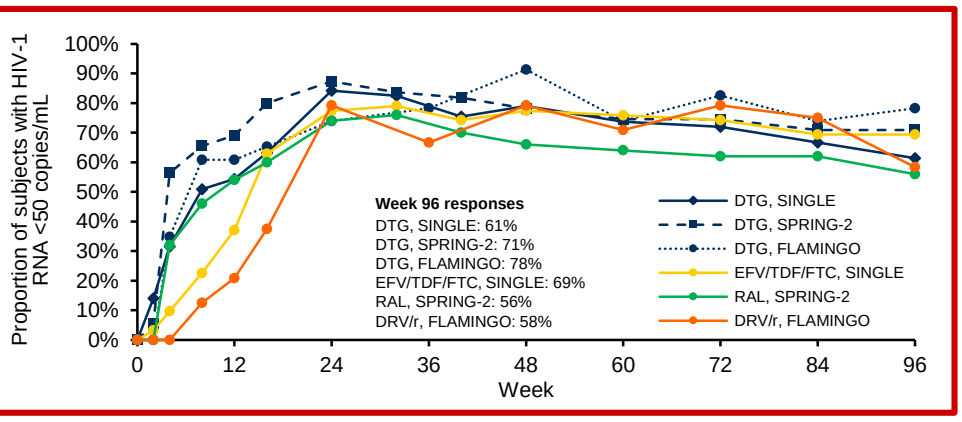


Figure 3. Snapshot by Visit: Subjects With Baseline VL >100,000 copies/mL

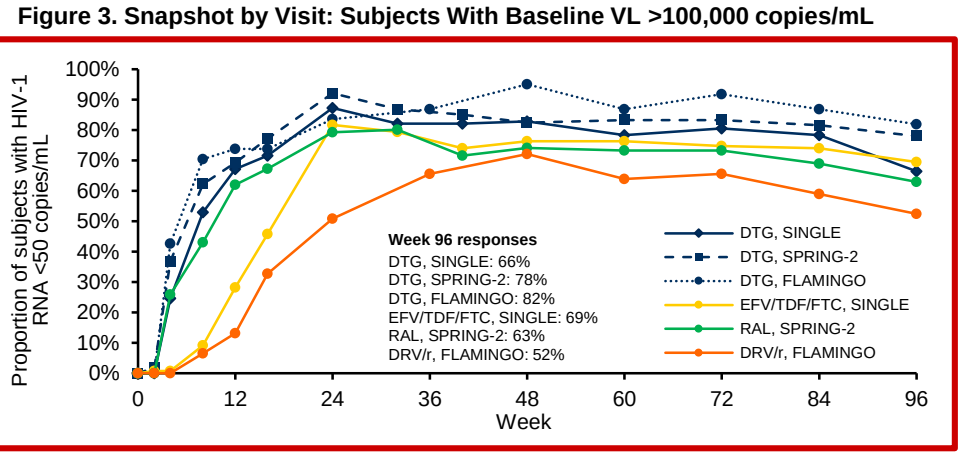


Table 1. Number of Patients in Each Subgroup

	SPRING-2		SINGLE		FLAMINGO	
	DTG	RAL	DTG	EFV/TDF/FTC	DTG[a]	DRV/r
Overall	411	411	414	419	242	242
Age <50 years	370	365	361	375	214	206
Age >50 years	41	46	53	44	28	36
White	346	352	284	285	173	176
Non-white	65	59	130	133	69	66
Male	348	355	347	356	211	201
Female	63	56	67	63	31	41

[a]DTG treatment with protocol-defined NRTI backbone (ABC/3TC or TDF/FTC).

Figure 4. Snapshot by Visit: Subjects Receiving ABC/3TC NRTI Backbone

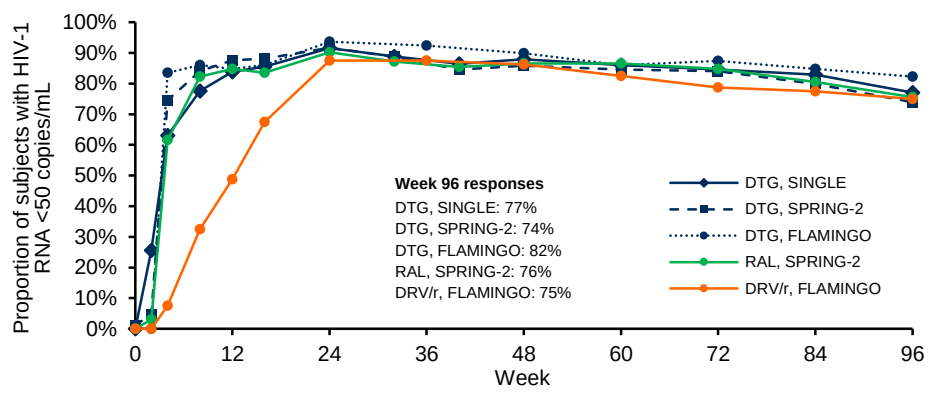
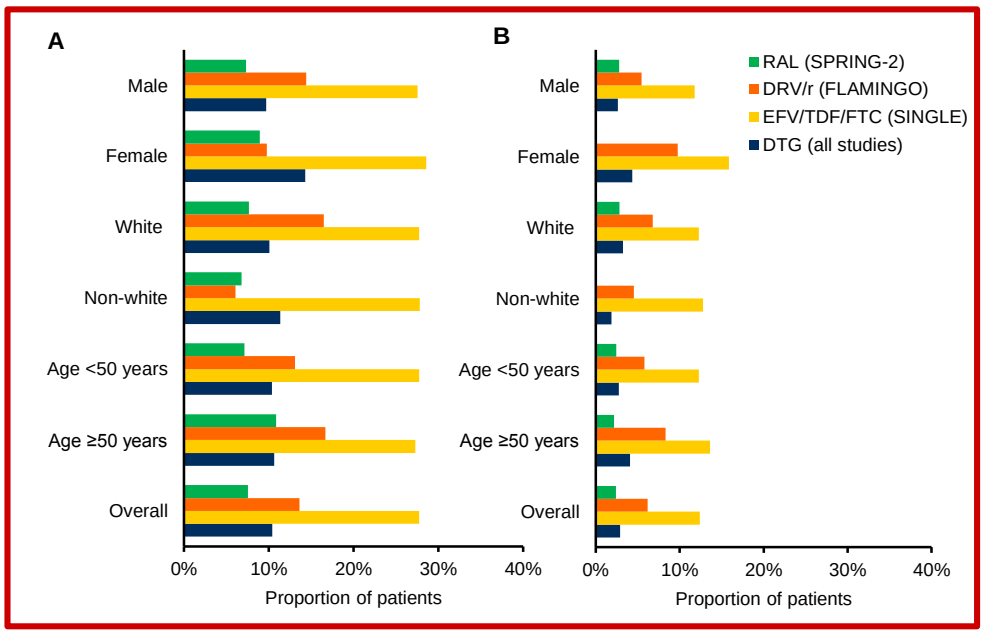


Figure 5. Adverse Events by Subgroup. (A) Grade 2 to 4 Drug-Related Adverse Events. (B) Adverse Events Leading to Withdrawal



- There were a total of 7 drug-related SAEs in the DTG treatment-naive studies
- 5 of 7 SAEs were in men, 6 of 7 were in white participants, and none were in those over 50 years of age

Conclusions

- In the 3 treatment-naive clinical trials, DTG QD was seen to be a consistently effective and well-tolerated treatment option across age, race and gender subgroups
- DTG efficacy was maintained in subjects with CD4 <200 cells/mm³, VL >100,000 copies/mL, and in those subjects receiving ABC/3TC backbone
- Some numerical variability among the subgroups is likely explained by small sample sizes

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References: 1. Raffi et al. *Lancet Infect Dis.* 2013;13:927-935. **2.** Molina et al. *J Int AIDS Soc.* 2014;17(4; suppl 3):19490. **3.** Walmsley et al. CROI 2014; Boston, MA. Poster 543.