

Dolutegravir in Patients with Integrase-Resistant HIV  
**VIKING-3**

# Dolutegravir in Patients with Integrase Inhibitor Resistance

## VIKING-3: Study Design

Day 1

Day 7

Week 24

Functional Monotherapy Phase  
**Dolutegravir: 50 mg BID**

Continuation Phase  
**Dolutegravir: 50 mg BID + OBR**

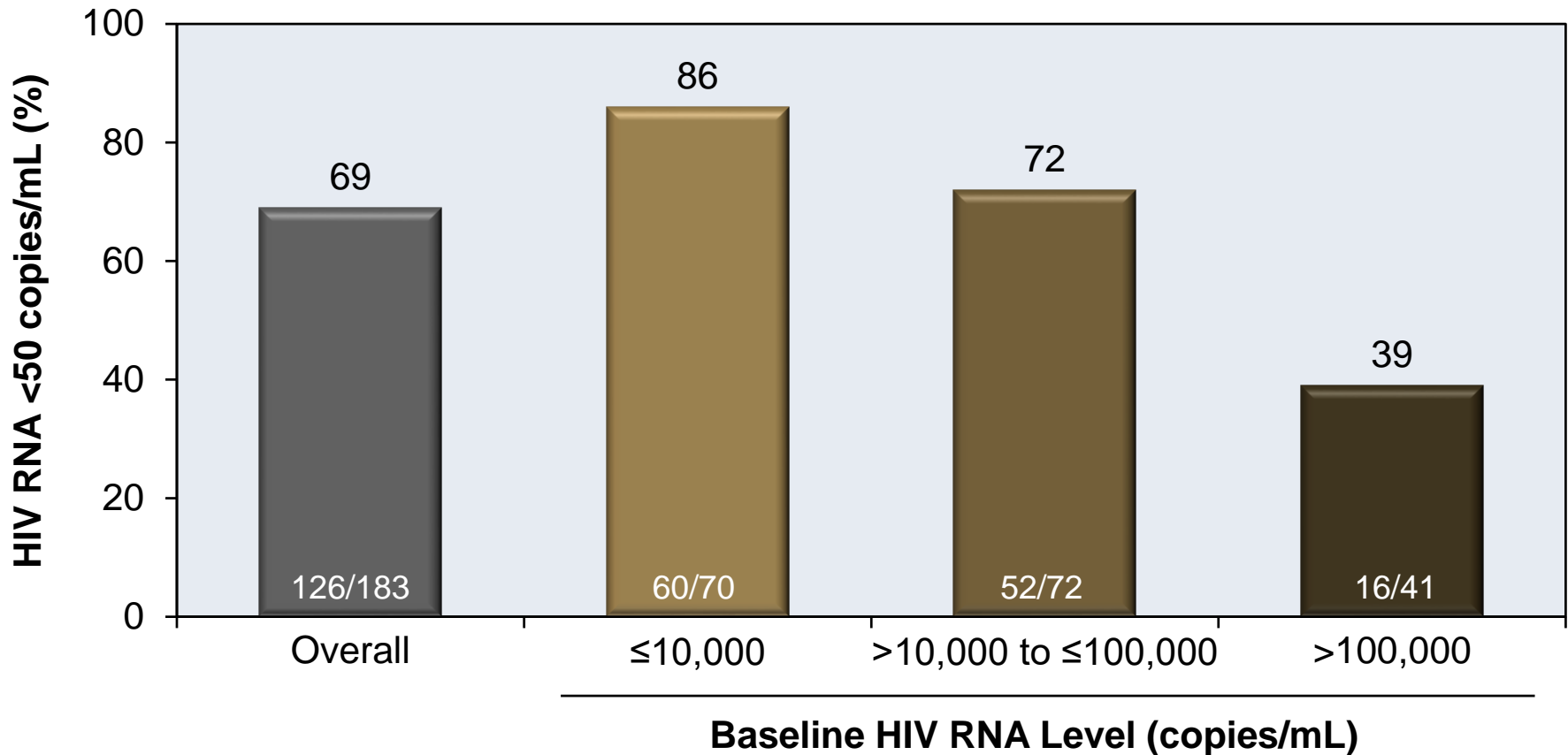
### Study Design: VIKING-3

- **Background:** Single arm, open-label, phase 3 trial to determine the efficacy of twice daily dolutegravir in patients with integrase resistance
- **Inclusion Criteria (n=183)**
  - Age  $\geq 18$
  - Antiretroviral experienced, resistance to raltegravir and/or elvitegravir
  - Resistance to 2 classes of ARVs (in addition to integrase resistance)
  - HIV RNA  $\geq 500$  copies/mL
  - At least one fully active drug for optimized background regimen
  - Dolutegravir naïve
- **Treatment arm:** Dolutegravir 50 mg twice daily, with OBR added on day 7

# Dolutegravir in Patients with Integrase Inhibitor Resistance

## VIKING-3: Results

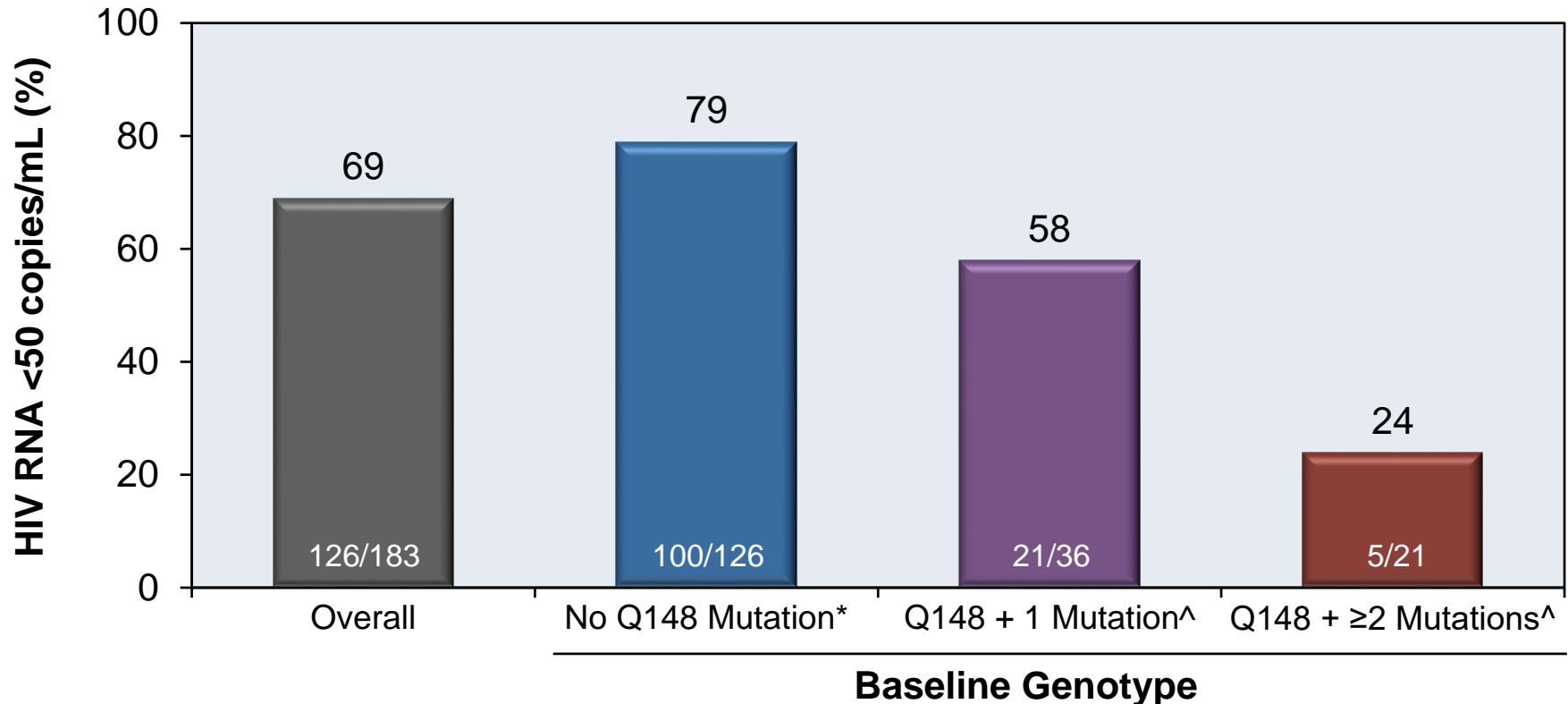
24 Week Virologic Response, by Baseline HIV RNA Level



# Dolutegravir in Patients with Integrase Inhibitor Resistance

## VIKING-3: Results

24 Week Virologic Response, by Baseline Genotype



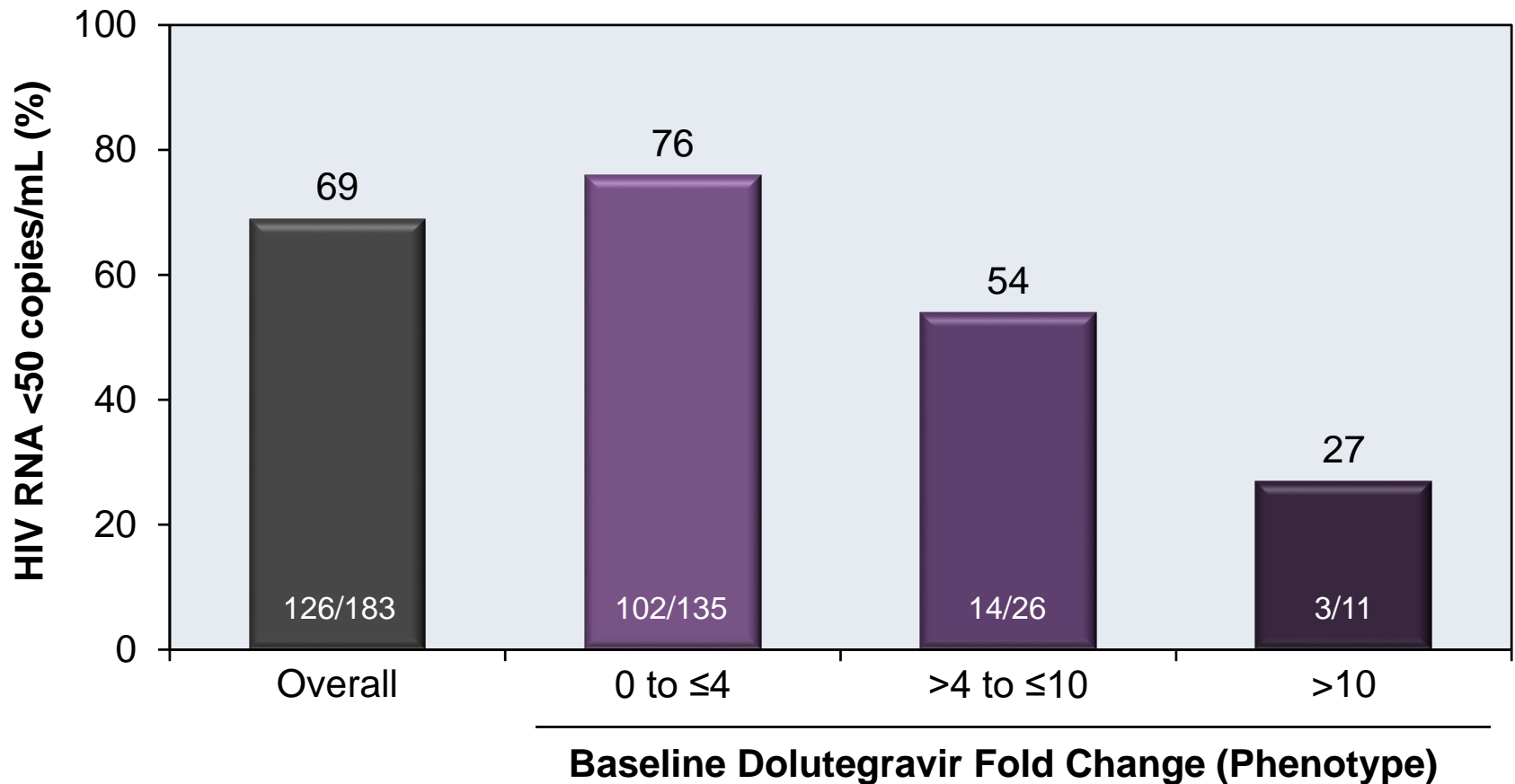
\*Included primary INI-resistance mutations N155H, Y143C/H/R, T66A or E92Q or only historical evidence of resistance

^Secondary mutations from G140A/C/S, E138A/K/T or L74I.

# Dolutegravir in Patients with Integrase Inhibitor Resistance

## VIKING-3: Results

24 Week Virologic Response, by Baseline Phenotype



Source: Castagna A, et al. J Infect Dis. 2014;210:354-62.

# Dolutegravir in Patients with Integrase Inhibitor Resistance

## VIKING-3: Conclusions

**Conclusions:** “Dolutegravir 50 mg BID-based therapy was effective in this highly treatment-experienced population with integrase inhibitor-resistant virus.”

# Acknowledgment

The **National HIV Curriculum** is an AIDS Education and Training Center (AETC) Program supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$800,000 with 0% financed with non-governmental sources. This project is led by the University of Washington's Infectious Diseases Education and Assessment (IDEA) Program.

*The content in this presentation are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government.*

