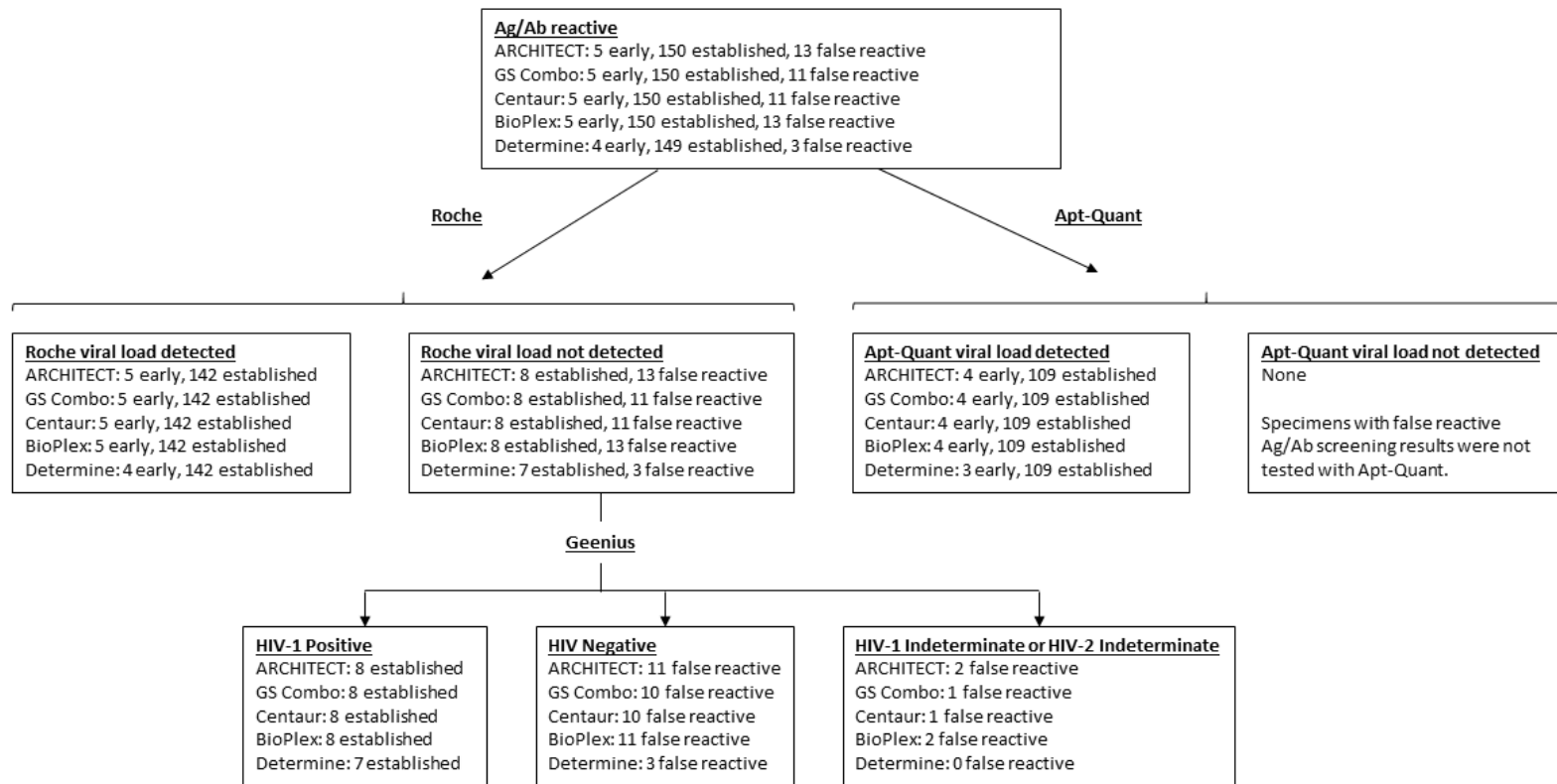**Supplemental Figure 3a.** Outcomes of recommended algorithm for 193 specimens reactive on ≥1 Ag/Ab screening test.

Abbreviations: HIV, human immunodeficiency virus; Ag, antigen; Ab, antibody; Apt-Qual, Gen-Probe Aptima HIV-1 RNA Qualitative Assay.

Note: All 193 specimens were reactive on at least one Ag/Ab screening test. Specimens with reactive Ag/Ab, negative or indeterminate Geenius, and reactive Aptima HIV-1 RNA Qualitative Assay results were classified as "early infection." Specimens with reactive Ag/Ab and HIV-1 positive Geenius results were classified as "established infection." Specimens with reactive Ag/Ab, negative or indeterminate Geenius, and nonreactive Aptima HIV-1 RNA Qualitative Assay results were classified as "false reactive" on an Ag/Ab screening test.

**Ag/Ab reactive**
ARCHITECT: 5 early, 150 established, 13 false reactive
GS Combo: 5 early, 150 established, 11 false reactive
Centaur: 5 early, 150 established, 11 false reactive
BioPlex: 5 early, 150 established, 13 false reactive
Determine: 4 early, 149 established, 3 false reactive

Roche

Apt-Quant

**Roche viral load detected**
ARCHITECT: 5 early, 142 established
GS Combo: 5 early, 142 established
Centaur: 5 early, 142 established
BioPlex: 5 early, 142 established
Determine: 4 early, 142 established

**Roche viral load not detected**
ARCHITECT: 8 established, 13 false reactive
GS Combo: 8 established, 11 false reactive
Centaur: 8 established, 11 false reactive
BioPlex: 8 established, 13 false reactive
Determine: 7 established, 3 false reactive

**Apt-Quant viral load detected**
ARCHITECT: 4 early, 109 established
GS Combo: 4 early, 109 established
Centaur: 4 early, 109 established
BioPlex: 4 early, 109 established
Determine: 3 early, 109 established

**Apt-Quant viral load not detected**
None

Specimens with false reactive Ag/Ab screening results were not tested with Apt-Quant.

Geenius

**HIV-1 Positive**
ARCHITECT: 8 established
GS Combo: 8 established
Centaur: 8 established
BioPlex: 8 established
Determine: 7 established

**HIV Negative**
ARCHITECT: 11 false reactive
GS Combo: 10 false reactive
Centaur: 10 false reactive
BioPlex: 11 false reactive
Determine: 3 false reactive

**HIV-1 Indeterminate or HIV-2 Indeterminate**
ARCHITECT: 2 false reactive
GS Combo: 1 false reactive
Centaur: 1 false reactive
BioPlex: 2 false reactive
Determine: 0 false reactive

**Supplemental Figure 3b.** Outcomes of alternative algorithm for 193 recommended algorithm-defined positive and false-positive specimens by individual screening test and infection category.

Abbreviations: HIV, human immunodeficiency virus; Ag, antigen; Ab, antibody; Roche, Roche COBAS AmpliPrep/ COBAS TaqMan HIV-1 Test; Apt-Quant, Hologic Aptima HIV-1 Quant Assay.

Note: All 193 specimens were reactive on at least one Ag/Ab screening test. Results from the recommended algorithm were used to define specimens as "early infection," "established infection," or "false reactive."