week after ZV. Independent positive effects on peak memory Th1 VZV CMI included the baseline CMI and negative effects included blood CD4+FOXP3+% T regulatory (Treg) and CD8+PD1+% T exhausted cells. Independent positive effects on peak effector Th1 VZV CMI included baseline CMI and negative effects included blood CD8+CD25+FOXP3+% Treg. Age did not have an independent effect on peak CMI. Independent positive effects on persistent (1 month after ZV) Th1/Th2 immune response in adults ≥65 YOA who previously received ZVL stimulates strong immune responses and does not raise safety concerns.

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### 1341. Humoral and Cellular Immune Response of Zoster Vaccine within One Year after Herpes Zoster

#### Background.

Herpes zoster vaccination is recommended to patients with a prior history of herpes zoster to prevent reactivation. However, the appropriate timing of vaccination is controversial. We compared immunogenicity of vaccine according to timing of vaccination after zoster illness.

#### Methods.

In this prospective observational study, subjects were stratified into two groups by the vaccination timing since their zoster illness: 6–12 months (within-1 year group) vs. ≥15 years before the zoster illness (after-1 year group). Ages were not significantly different between groups. The baseline geometric mean titer (GMT) of VZV IgG was higher in the within-1 year group than in the after-1 year group (245.8 IU/mL vs. 124.9 IU/mL; P = 0.040). The GMT of spot forming cell (SFC) counts by ELISPOT at baseline and 6 weeks after vaccination were significantly different between groups. The GMFRs of SFCs were also comparable.

#### Results.

A total of 59 patients (18 in the within-1 year group and 41 in the after-1 year group) were enrolled. Ages were not significantly different between groups. The GMT of VZV IgG was lower in the within-1 year group than in the after-1 year group (1.42 vs. 2.46; P = 0.002). The GMT of spot forming cell (SFC) counts by ELISPOT at baseline and 6 weeks after vaccination were significantly different between groups. The GMFRs of SFCs were also comparable.

#### Conclusion.

Zoster vaccination within 1 year after zoster illness may have disadvantage in the aspect of humoral immune response (ClinicalTrials.gov number, NCT034572).

**Disclosures.** All authors: No reported disclosures.

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### 1342. Immunogenicity of Herpes Zoster Vaccine in Older Adults Previously Vaccinated with a Live-Attenuated Herpes Zoster Vaccine: A Phase III, Group-Matched, Clinical Trial

#### Background.

Herpes zoster vaccination is recommended to patients with a prior history of zoster to prevent reactivation. However, the appropriate timing of vaccination is controversial. We compared immunogenicity of vaccine according to timing of vaccination after zoster illness.

#### Methods.

In this phase III, group-matched, open, multicenter study (NCT02581410), 2 parallel groups of adults ≥65 years of age (YOA) received 2 HZ/su doses 2 months apart. A co-primary objective was to compare humoral immune responses 1 month post-dose 2 (MTD) in the 2 groups. GMFR of HZ/su vaccination in adults ≥65 YOA who previously received ZVL was assessed to evaluate the immune responses to the vaccine in adults ≥65 YOA who previously received ZVL. Investigators, no suspected HZ cases and no pIMDs were reported up to M3. Significant differences in humoral immune responses were found between groups (Figure 1). No clinically meaningful differences between frequencies of solicited AEs, unsolicited AEs or SAEs in the 2 groups were observed (Table 2). No SAEs considered vaccine-related by investigators, no suspected HZ cases and no pIMDs were reported up to M3.

#### Conclusion.

HZ/su vaccination in adults ≥65 YOA who previously received ZVL stimulates strong immune responses and does not raise safety concerns.

**Funding.** GlaxoSmithKline Biologicals SA

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### 1. Anti- gE antibody geometric mean concentrations (GMCs) and adjusted GMC ratio (HZ/NonVac vs HZ PreVac) (ATP cohort for immunogenicity)

| Timepoint | N | Value | Adjusted GMC Ratio |
|-----------|---|-------|-------------------|
| HZ/PreVac | 204 | 1784.3 | 2040.5 |
| HZ/NonVac | 204 | 1805.1 |

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### Table 2. Frequencies of solicited and unsolicited AEs; SAEs and pIMDs (YVC)

| AE | Reporting Period | HZ/PreVac | HZ/NonVac |
|----|------------------|-----------|-----------|
| N  | n [%] (95% CI)   | N  | n [%] (95% CI) |
| ---|------------------|---|-----------------|
| -  | -                | -  | -               |

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