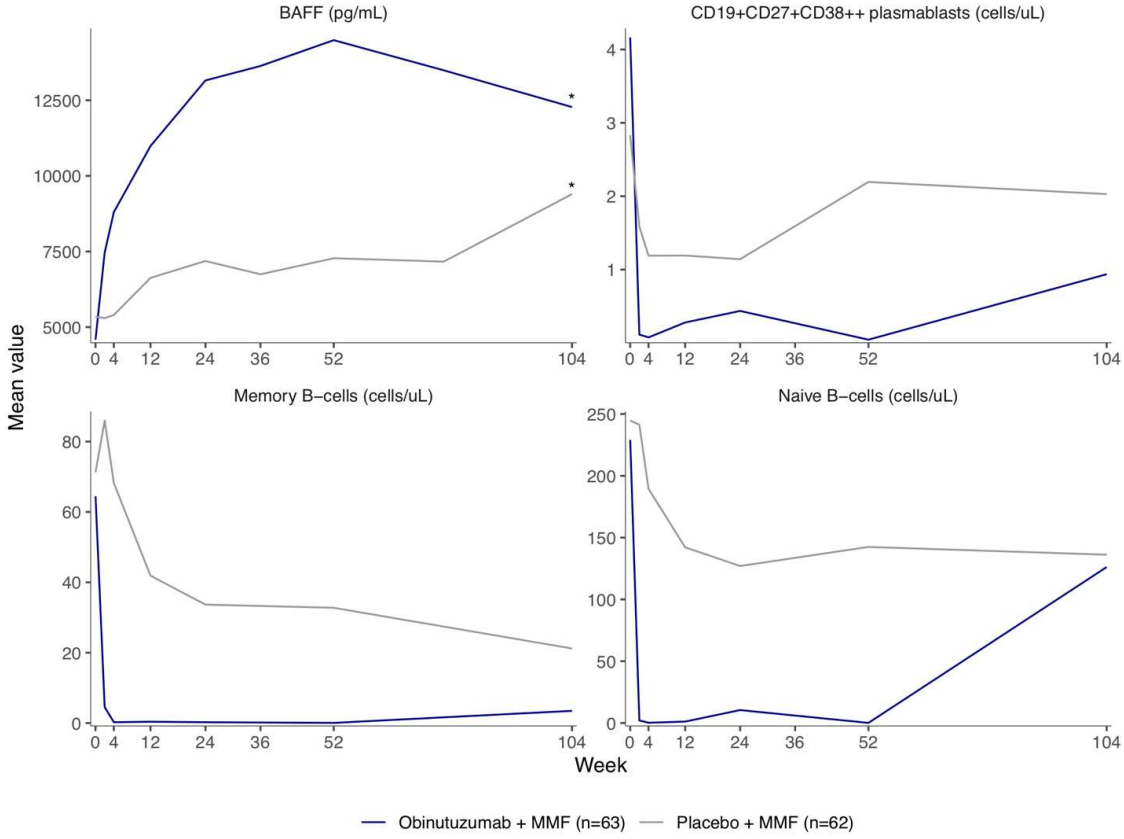
## Supplementary Material

**Supplemental Figure 1.** Mean Peripheral B-Cell Subset and BAFF Measurements




Only visits with 10 or more nonmissing values are presented.
* Week 104 BAFF measurements are available for only 23 and 21 patients in the obinutuzumab and placebo groups, respectively.

BAFF = B-cell Activating Factor
Memory B-cells: $CD45^{+}$, $CD19^{+}$, $CD27^{+}$
Naïve B-cells: $CD45^{+}$, $CD19^{+}$, $IgD^{+}$, $CD27^{-}$, $CD38^{dim/-}$
Plasmablasts: $CD45^{+}$, $CD19^{+}$, $CD27^{+}$, $CD38^{bright}$

**Supplemental Table 1.** Number (proportion) of patients with IgG and IgM less than lower limit of normal over time

| | **IgG < 5.65 g/L** | | **IgM < 0.4 g/L** | |
|---|---|---|---|---|
| | **Obinutuzumab (n=64)** | **Placebo (n=61)** | **Obinutuzumab (n=64)** | **Placebo (n=61)** |
| Baseline | 13 (20) | 13 (21) | 11 (17) | 7 (11) |
| Week 12 | 14 (23) | 11 (18) | 22 (34) | 8 (13) |
| Week 24 | 10 (17) | 5 (9) | 27 (42) | 7 (11) |
| Week 52 | 7 (12) | 1 (2) | 25 (39) | 6 (10) |
| Week 76 | 6 (11) | 4 (8) | 22 (34) | 5 (8) |
| Week 104 | 5 (9) | 2 (4) | 21 (33) | 5 (8) |

Data are n (%) of patients. One patient randomised to placebo inadvertently received obinutuzumab during the first cycle. This patient is included in the obinutuzumab group for safety analyses.



Furie RA, *et al. Ann Rheum Dis* 2022; 81:100–107. doi: 10.1136/annrheumdis-2021-220920

**Supplemental Table 2.** B-cell Depletion to ≤5 cells/μL in NOBILITY and LUNAR

| CD19 Measurement | NOBILITY obinutuzumab + MMF (n=63) | LUNAR rituximab + MMF (n=72) |
|---|---|---|
| Baseline | 0% (0 of 48) | 0% (0 of 65) |
| Week 2 | 98% (51 of 52) | 52% (35 of 67) |
| Week 4 | 96% (54 of 56) | 74% (49 of 66) |
| Week 12 | 96% (52 of 54) | 87% (59 of 68) |
| Week 24 | 93% (52 of 56) | 52% (31 of 60) |
| Week 52 | 94% (51 of 54) | 48% (30 of 63) |

In NOBILITY, obinutuzumab 1000 mg was administered on days 1, 15, 168, and 182.

In LUNAR, rituximab 1000 mg was administered on days 1, 15, 168, and 182.

Patients in both studies received treatment with MMF, pulse-dose corticosteroids, and a corticosteroid taper.

Rovin BH, Furie R, Latinis K, et al. Efficacy and safety of rituximab in patients with active proliferative lupus nephritis: the Lupus Nephritis Assessment With Rituximab study. Arthritis Rheum 2012;64:1215-26.