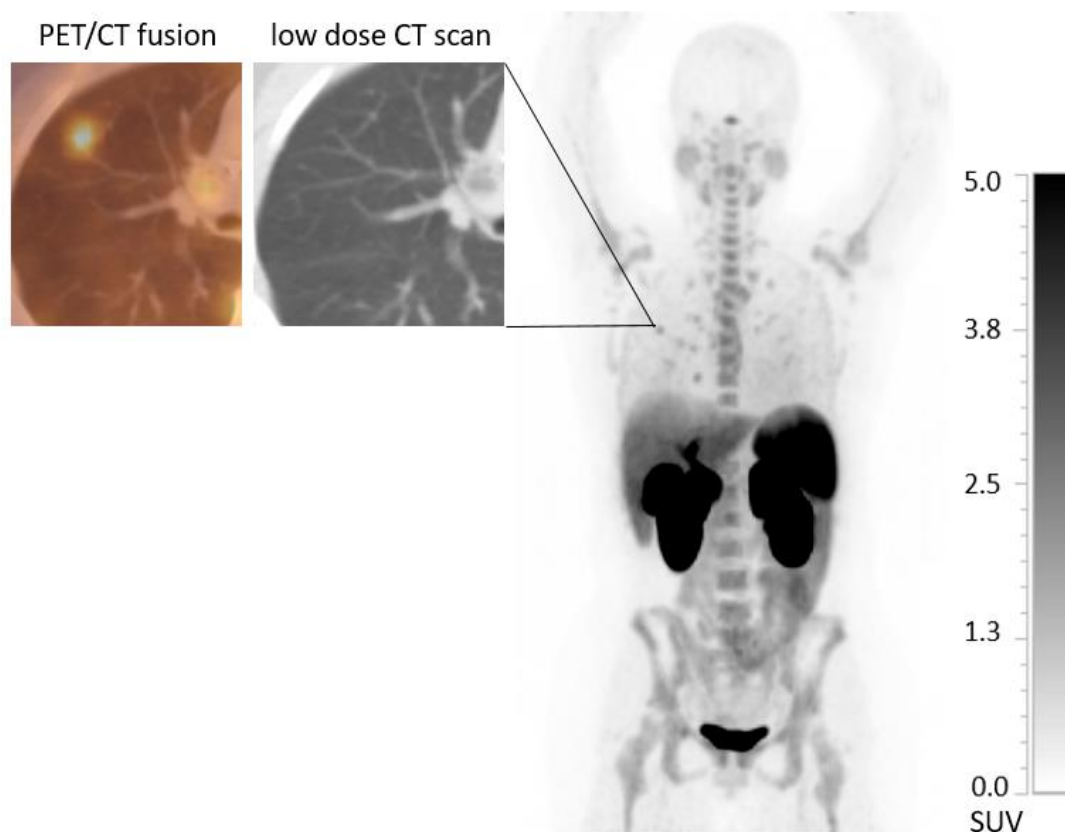


1 **Exploring the predictive potential of PD-L1 expression in healthy**
2 **organs and lymph nodes as measured by ^{18}F -BMS986192 PET:**
3 **pooled analysis of data from four solid tumor types**

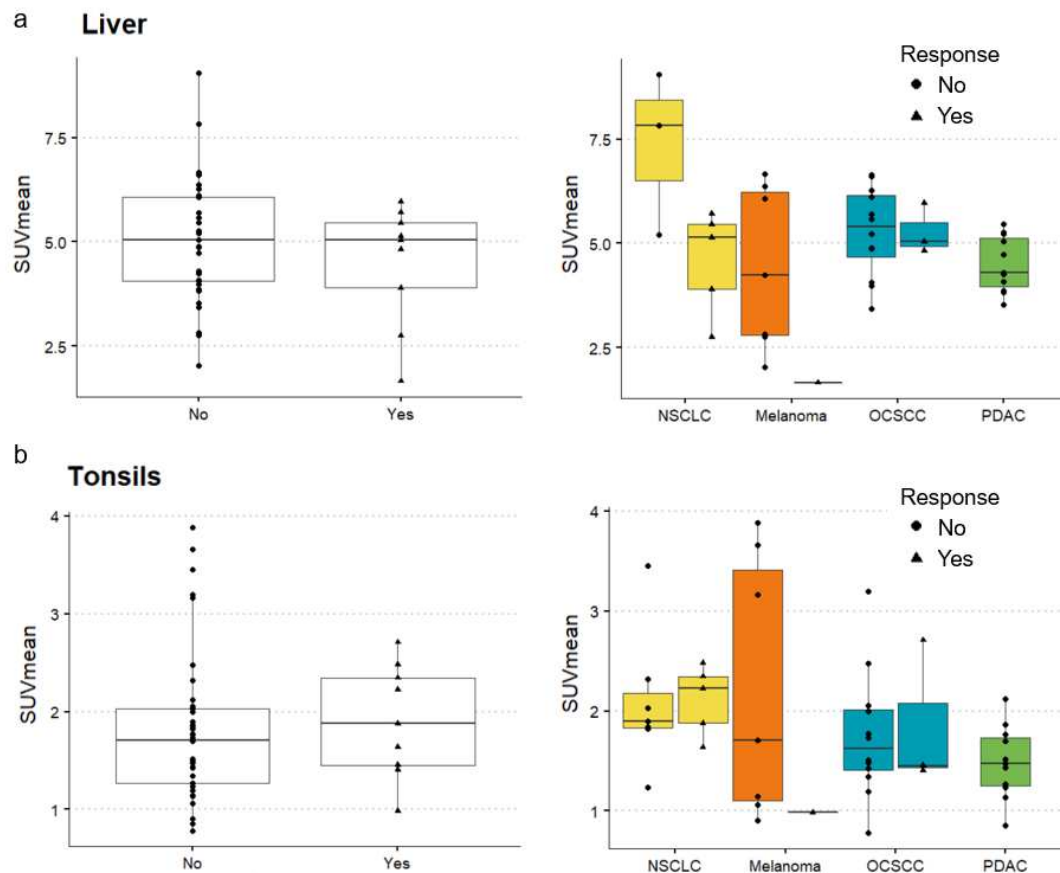
4 **Supplemental figures**



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7 **Supplemental Figure 1: ^{18}F -BMS-986192 PET images (maximum intensity**
8 **projection) of a patient with PDAC at baseline.** An example of an area with high
9 focal tracer uptake in the right lung is highlighted (SUVmax 4.3). On the low dose CT
10 scan no anatomical substrate was seen. Abbreviations: PDAC = pancreatic ductal
11 adenocarcinoma, PET = positron emission tomography, CT = computed
12 tomography).

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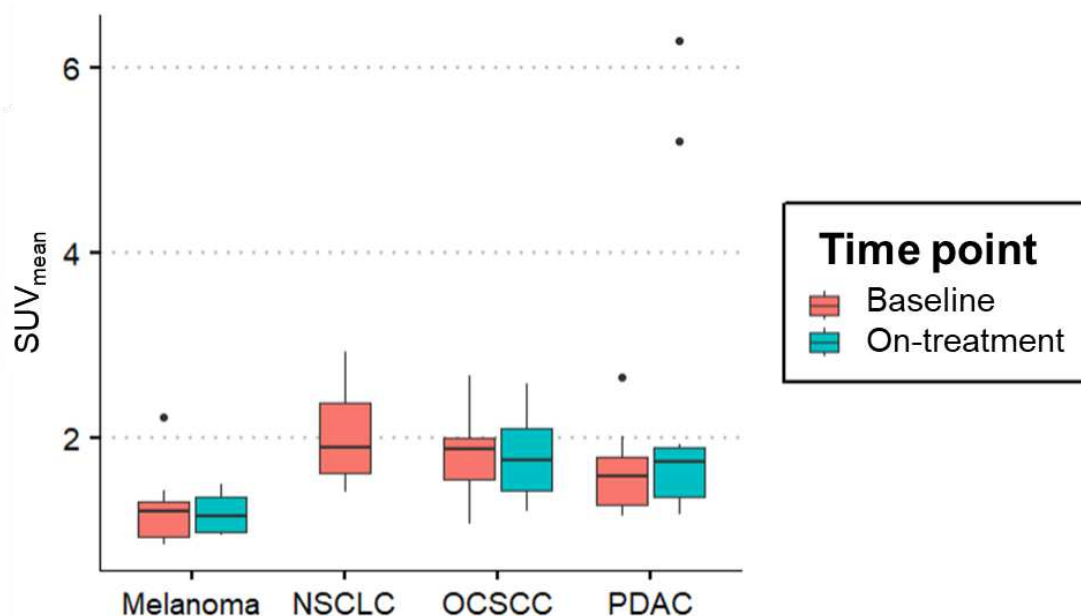
15 **Supplemental Figure 2: liver and tonsil uptake in relation to response.** ¹⁸F-BMS-
16 986192 uptake in liver and tonsils at baseline is not statistically different between
17 non-responding and responding patients (Liver SUV_{mean} 5.0 ±1.5 vs. 4.5 ±1.4; p=0.3,
18 Tonsils: SUV_{mean} 1.8 ±0.8 vs. 1.9 ±0.6; p=0.7, two-sided t-tests).

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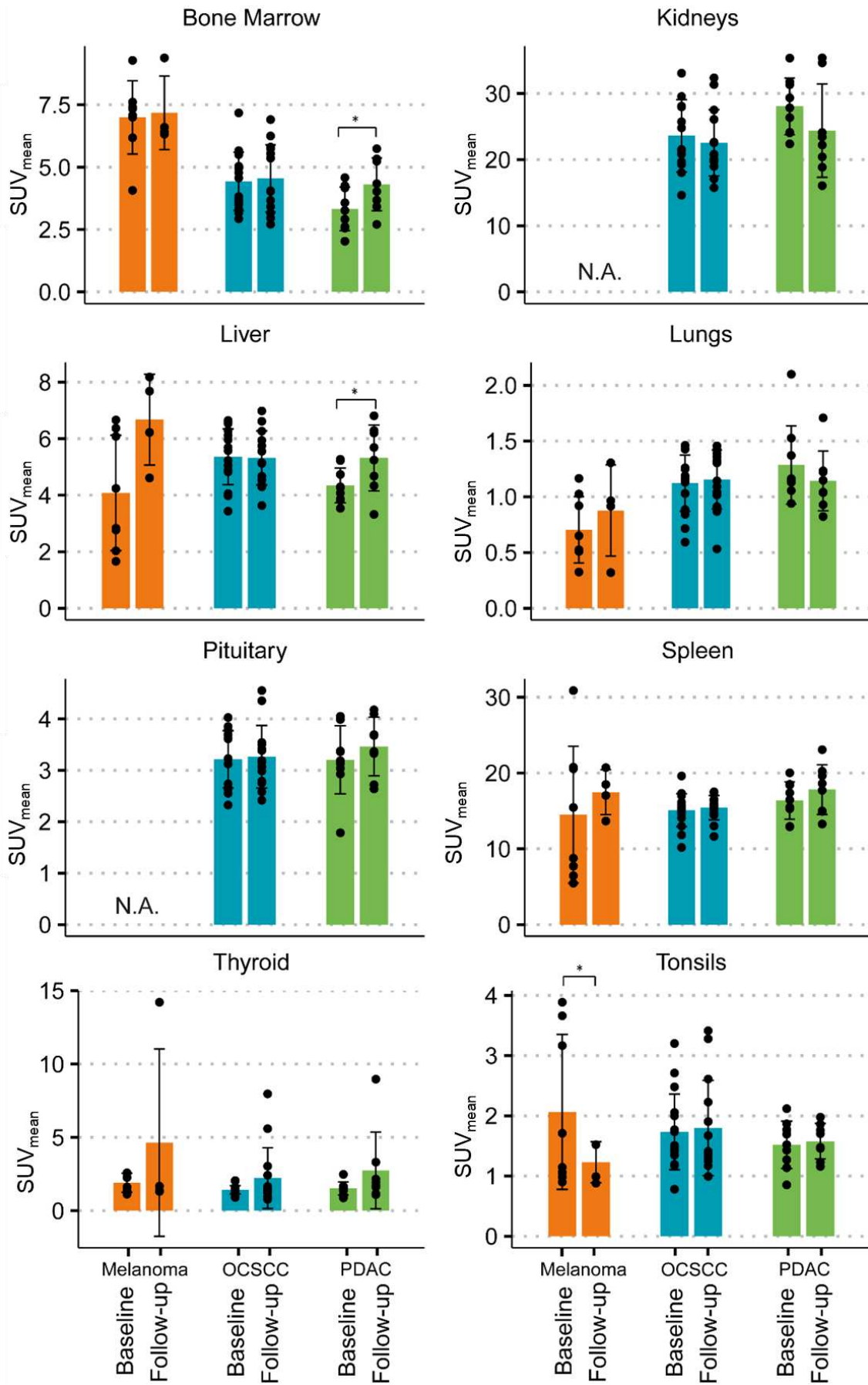
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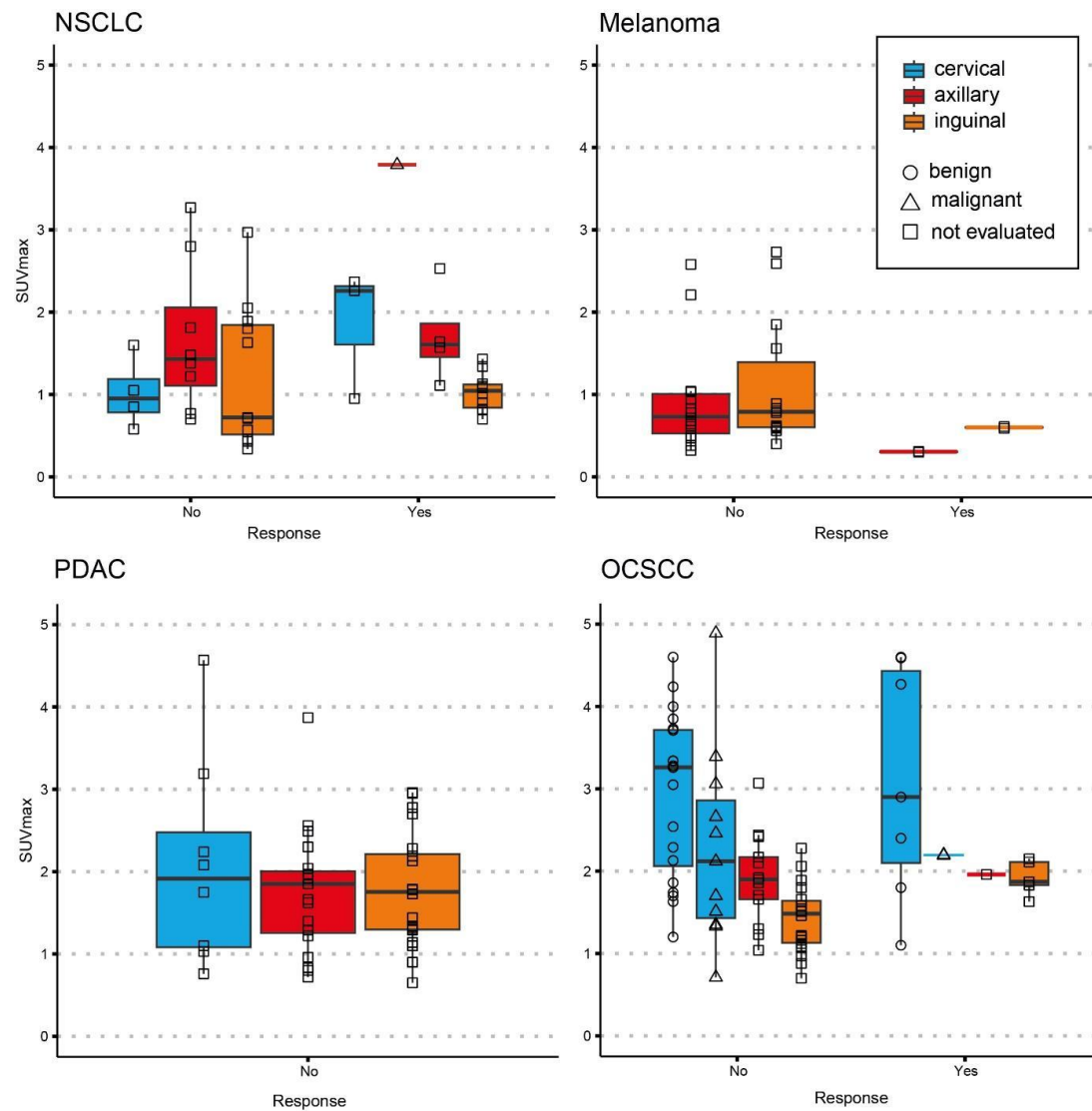
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24 **Supplemental Figure 3: Aortic arch tracer availability (SUV_{mean}) between**
25 **baseline and on-treatment time points per tumor type.** Note two major outliers in
26 the PDAC on-treatment cohort, these two patients were excluded from further
27 analysis. No statistically significant differences were observed between baseline and
28 on-treatment uptake (Melanoma $p=0.68$, OCSCC $p=0.89$, PDAC $p=0.48$, Mann-
29 Whitney U-tests).



31 **Supplemental Figure 4: ^{18}F -BMS-986192 tracer uptake (SUV_{mean}) in healthy**
32 **tissues at baseline and follow-up for patients with melanoma, OCSCC and**
33 **PDAC.** For patients with PDAC liver and bone marrow uptake were significantly
34 higher on-treatment (PDAC liver: $p=0.04$, PDAC bone marrow: $p=0.005$, paired t-
35 tests). Tonsil uptake has been reported as significantly higher at baseline than follow-
36 up ($p=0.002$, ¹) for melanoma patients. In other organs no significant differences
37 were observed. Mean and standard deviation are visualized per study and per scan
38 time point. N.A. = not available.

39



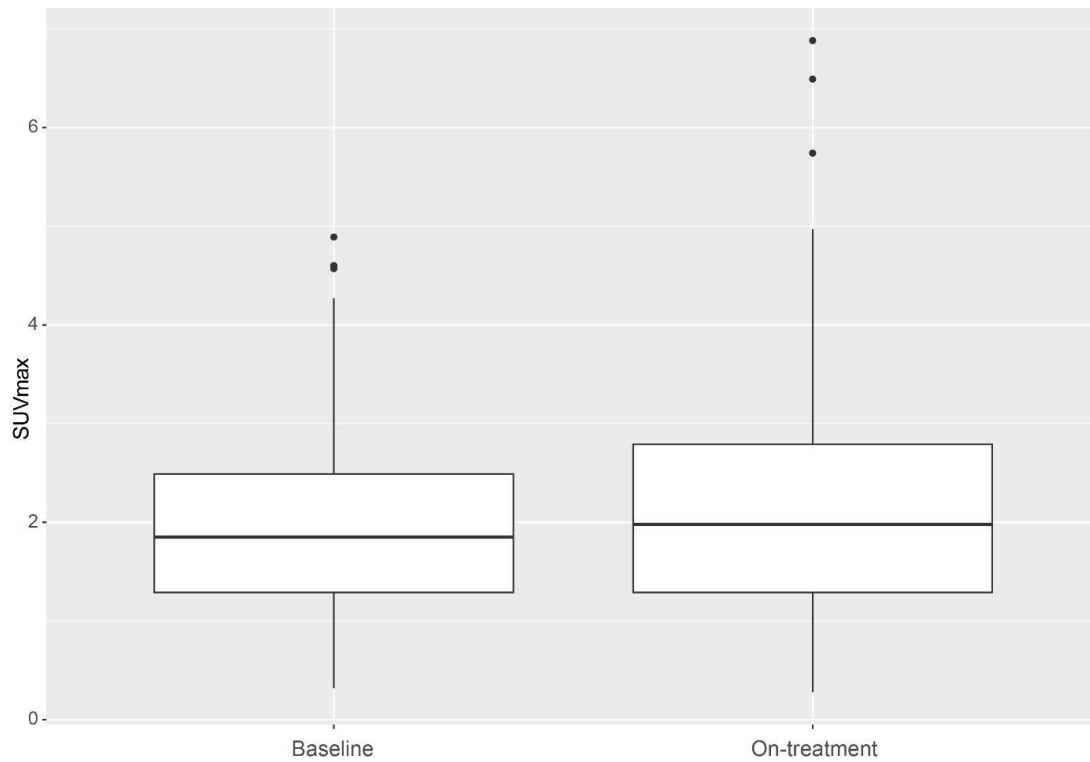
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42 **Supplemental Figure 5: baseline uptake of ¹⁸F-BMS-986192 in lymph nodes as**
43 **it relates to response to treatment. No correlation was found between SUV_{max} at**
44 **baseline and response to treatment (Mann Whitney U-test).**

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48 **Supplemental Figure 6: overall uptake of ¹⁸F-BMS-986192 in lymph nodes**
49 **increases from baseline to on-treatment.** Increase is shown from median SUV_{max}
50 1.63 to 1.98 (p=0.01, Wilcoxon signed rank test,).
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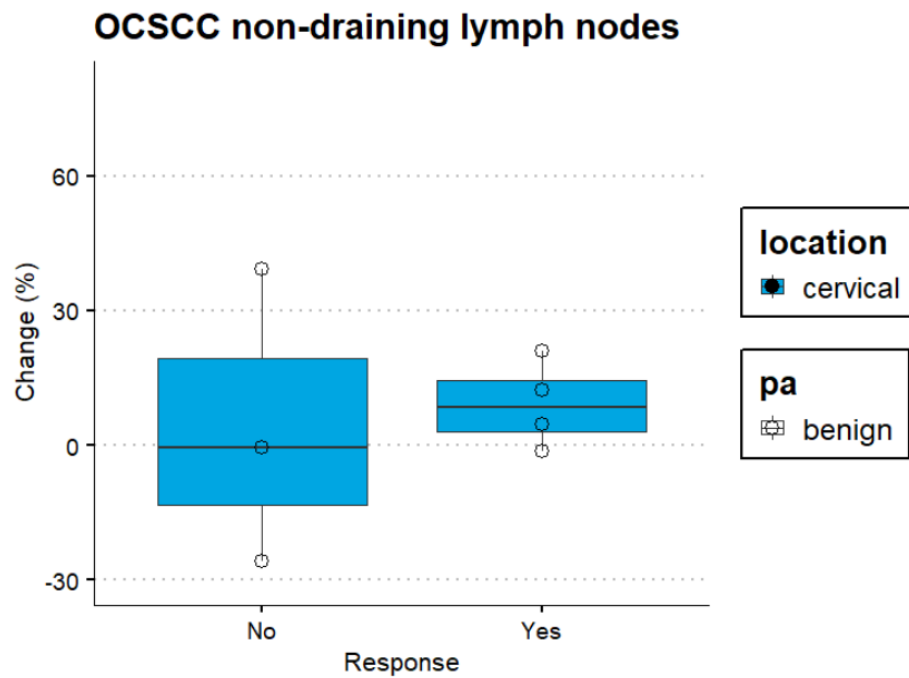
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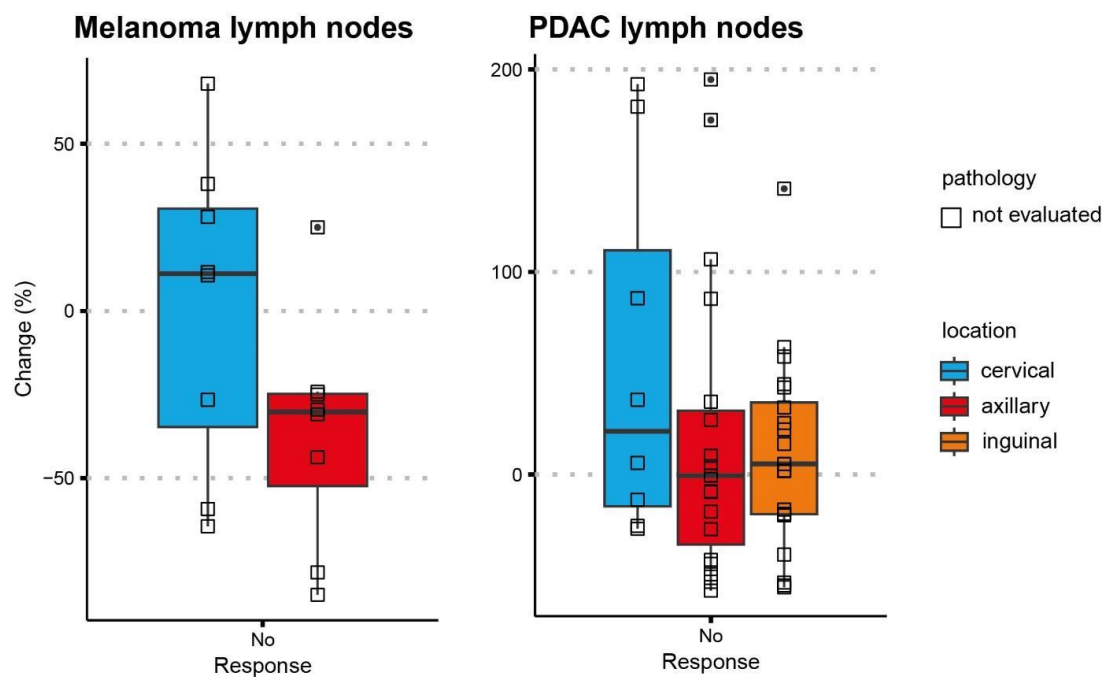
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Supplemental Figure 7: change (%) in ^{18}F -BMS-986192 uptake from baseline to on-treatment. No statistically significant difference was seen between responders and non-responders in the non-draining cervical lymph nodes of OCSCC patients (Mann-Whitney U-test).

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64 **Supplemental Figure 8: change (%) in ^{18}F -BMS-986192 uptake from baseline to**
 65 **on-treatment in PDAC and melanoma cohort.** Note that only non-responders were
 66 available for on-treatment assessment (there were no responders in the PDAC
 67 cohort, the responder in the melanoma cohort did not undergo follow-up scan).

68

69 References

- 70 1 Nienhuis, P. H. *et al.* (18)F-BMS986192 PET Imaging of PD-L1 in Metastatic Melanoma
 71 Patients with Brain Metastases Treated with Immune Checkpoint Inhibitors: A Pilot Study. *J*
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