Next-Generation-Sequencing Swiss Round Robin Test 2015

Dear participant

With this report we confirm your participation and your successful completion of the Clinical NGS RRT 2015.

The data presented in this report was subdivided for the participants working with the Cancer Hot Spot Panel v2 (CHP2; Figure 1), the Colon and Lung Cancer Panel v2 (CLP2; Figure 2), and the EGFRMM / SomaticMM panel (Figure 3), who received the DNA isolate no. 1.
Participants who received DNA isolate no. 2 were as well subdivided into three groups, accordingly: the ones who used the CHP2 (Figure 4), the CLP2 (Figure 5), or the TrueSeq panel (Figure 6).

For each figure, data from the participants was compared to a similar panel used at the University Hospital Zurich (USZ). The Ion Reporter software 4.2 and the same variant filter settings (Figure 7) were used to analyse the data from all Torrent users (CHP2, CLP2, and EGFRMM / SomaticMM panel). The TrueSeq panel results were derived from an Excel sheet with Illumina output data.
Only mutations that were verified by Sanger sequencing were included in this report. Based on the comparison of these verified mutations, we calculated the inter-laboratory agreement score, written at the x-axis below the corresponding sequencing site (H, hospital). Each sequencing site was anonymised.

On the y-axis, the variants reported are described as follows:
Gene: sample: coding change: Amino Acid change: variant allele frequency.

On the right panel of the figure, variant allele frequencies are depicted according to the USZ panel.

Black bars indicate a false negative by the sequencing site (H).
Red bars indicate a false negative due to the absence of sequencing data from the respective site (H).

Thank you very much again for participating in this RRT and with best regards: the lab for Clinical High-Throughput Genomics

Peter Wild
Markus Rechsteiner
Qing Zhong

Figure 1: DNA isolate no. 1 analysed with CHP2

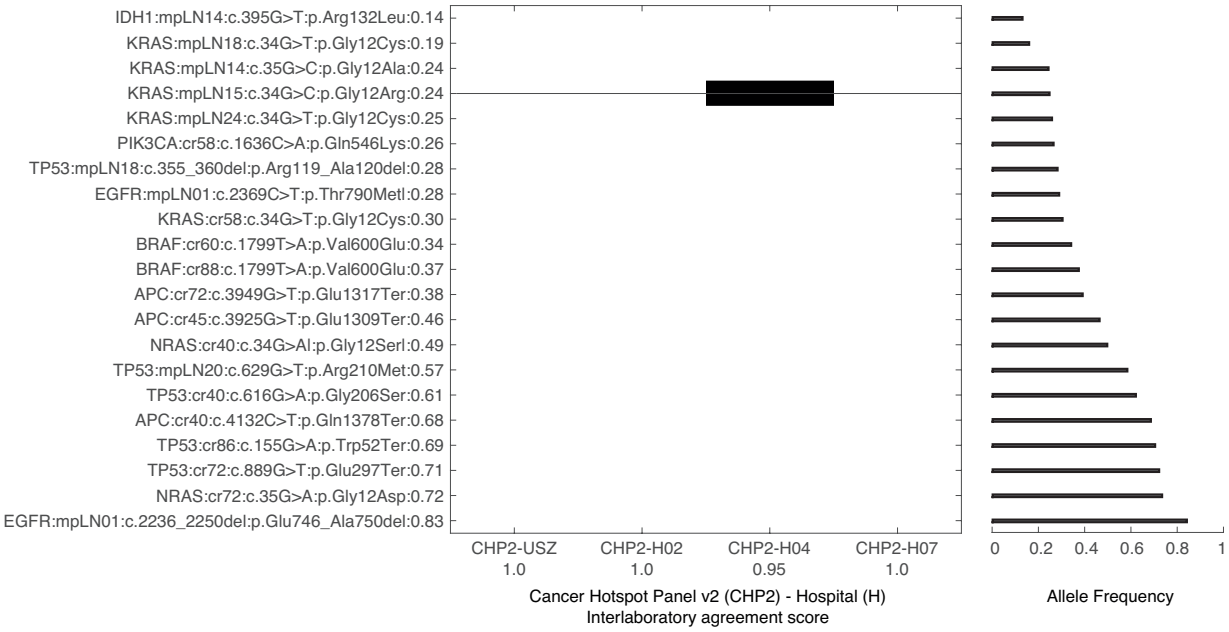

Figure 2: DNA isolate no. 1 analysed with CLP2

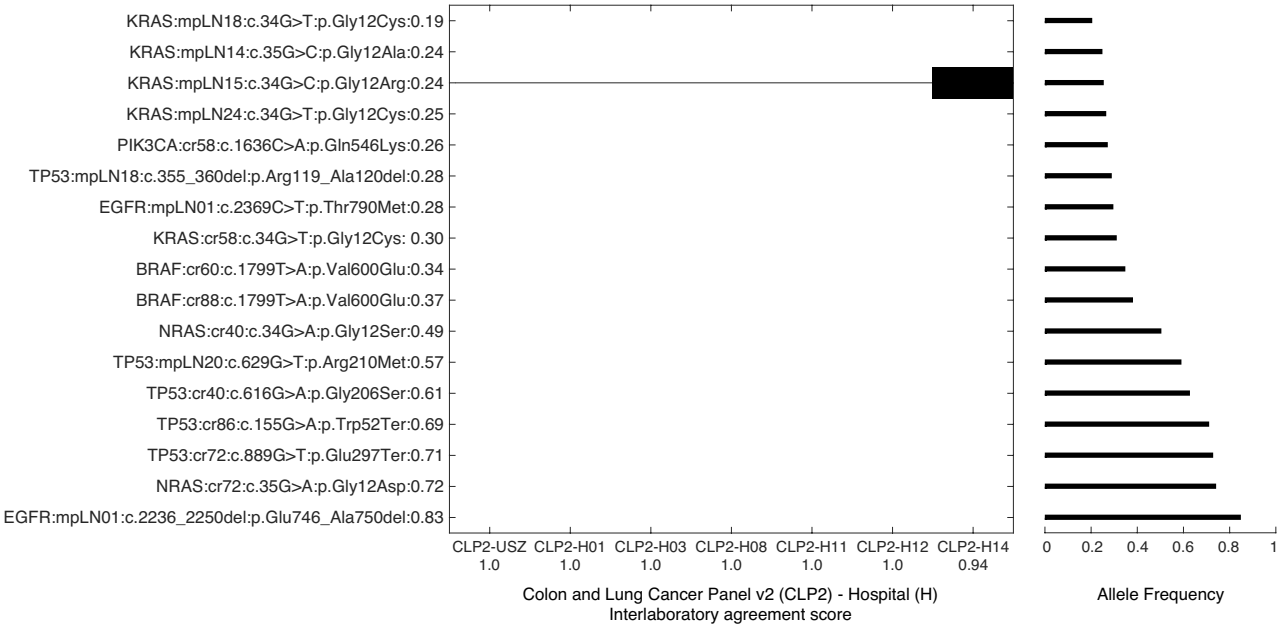

Figure 3: DNA isolate no. 1 analysed with EGFRMM / somaticMM panel

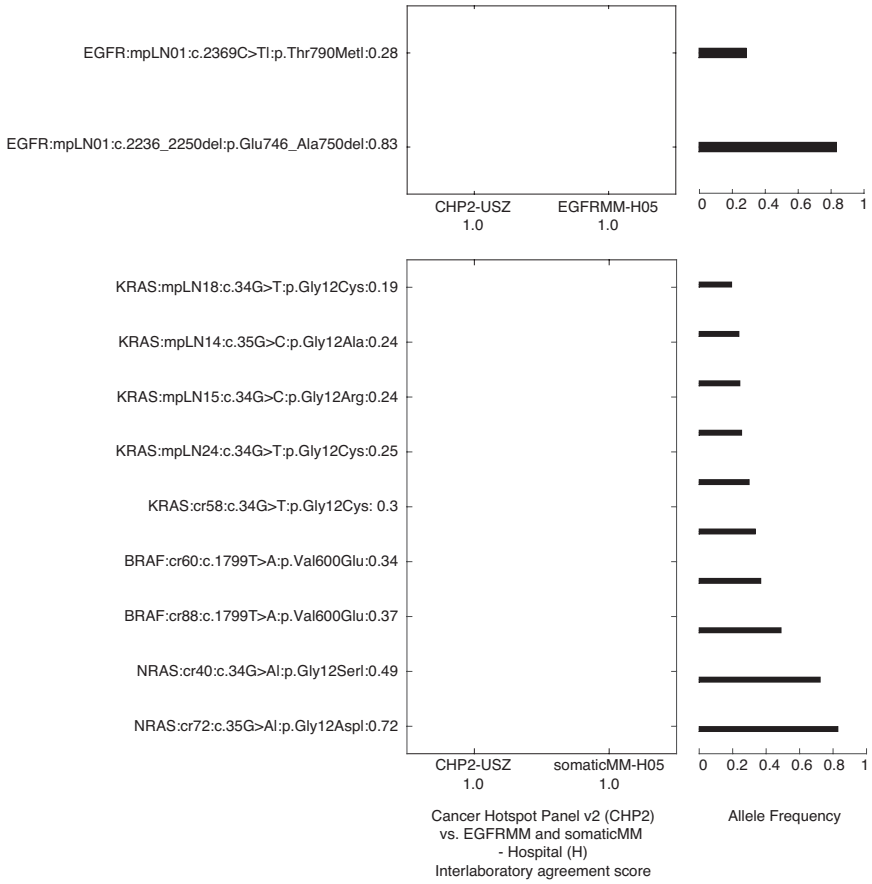

Figure 4: DNA isolate no. 2 analysed with CHP2

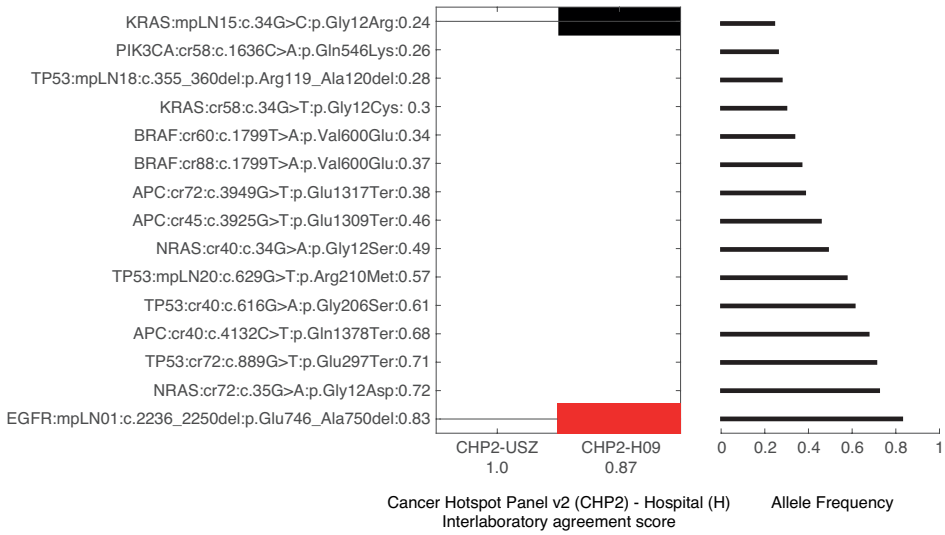

Figure 5: DNA isolate no. 2 analysed with CLP2

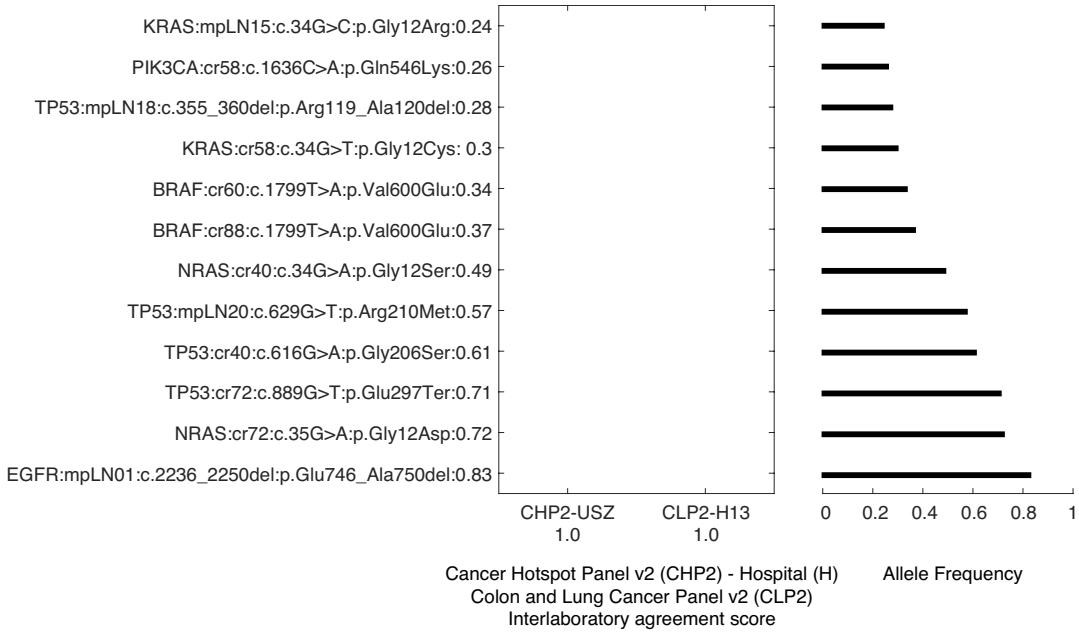

Figure 6: DNA isolate no. 2 analysed with TrueSeq panel

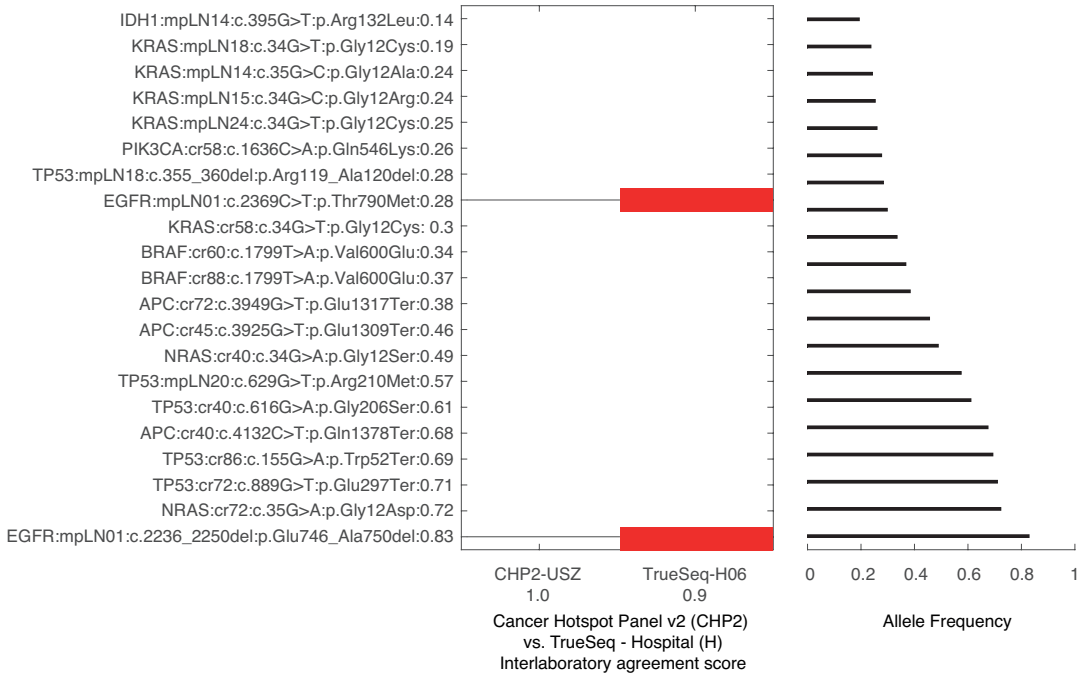

Figure 7: Analysis pipeline