

Table S1: Comparison of Idylla and Oncomine Pan Cancer results.

| ID | Baseline | | 8 Weeks | | PD | | PD 3 Months | |
|---------|------------------|-----------------------|-------------------------------|---|--|--|----------------------------|---|
| | Idylla | NGS (AF%) | Idylla | NGS | Idylla | NGS | Idylla | NGS |
| 01-0002 | - | - | KRAS: p.G12C; BRAF: p.V600E/D | KRAS: p.G12S (3,9%); BRAF: p.V600D (1,8%) | - | - | - | - |
| 01-0005 | - | TP53: p.R273C (14,6%) | - | TP53: p.R273C (11,2%) | NRAS: p.Q61R/K | NRAS: p.Q61K (2,8%); TP53: p.R273C (7,8%) | - | - |
| 01-0008 | - | - | - | - | KRAS: p.G12C | KRAS: p.G12C (6,4%) | sample not available | |
| 01-0010 | KRAS: p.G12R | KRAS: p.G12R (1,8%) | - | - | - | FBXW7: p.R465C (1,5%) | sample not available | |
| 01-0011 | KRAS: p.G12A | KRAS: p.G12A (2,2%) | - | - | KRAS: p.G12A | KRAS: p.G12A (3%); TP53: p.R280I (2,5%) | KRAS: p.G12A | KRAS: p.G12A (3,8%); TP53: p.R280I (2,9%) |
| 01-0014 | KRAS: p.A59T/E/G | KRAS: p.A59T (5,4%) | - | - | KRAS: p.A59T/E/G | KRAS: p.A59T (4,4%) | Invalid | EGFR: p.S492R (0,4%) |
| 01-0017 | - | - | KRAS: p.G12A | KRAS: p.G12A (5,1%) | BRAF: p.V600E/D | BRAF: p.V600E (2,5%) | - | - |
| 01-0019 | KRAS: p.G12D | KRAS: p.G12D (1,9%) | KRAS: p.G12D | KRAS: p.G12D (2%) | KRAS: p.G12D | KRAS: p.G12D (2,5%) | sample not available | |
| 01-0024 | - | - | - | - | NRAS: p.Q61H | NRAS: p.Q61H (4,1%) | - | - |
| 01-0027 | - | - | - | - | KRAS: p.G12R | KRAS: p.G12R (3,4%) | - | - |
| 01-0028 | - | - | - | - | - | - | KRAS: p.G12V; NRAS: p.Q61H | KRAS: p.G12V (2,4%) |
| 01-0033 | - | - | NRAS: p.A59T | NRAS: p.A59T (3,4%) | - | - | - | - |
| 01-0038 | - | - | NRAS: p.G12A/V | NRAS: p.G12V (2,2%) | - | - | - | - |
| 61-0001 | - | - | sample not available | | BRAF: p.V600E/D | BRAF: p.V600E (1,9%) | sample not available | |
| 06-0002 | - | TP53: p.R175H (5,4%) | sample not available | | KRAS: p.A146P/T/V; BRAF: p.V600E/D | KRAS: p.A146T (1,5%); BRAF: p.V600E (3,2%); TP53: p.R175H (2,8%) | sample not available | |
| 29-0001 | BRAF: p.V600E/D | BRAF: p.V600E (4,7%) | BRAF: p.V600E/D | BRAF: p.V600E (5,7%) | the sample at week 8 coincided with PD | | sample not available | |
| 26-0002 | - | - | - | - | BRAF: p.V600E/D | BRAF: p.V600E (2,6%) | - | - |
| 33-0004 | - | - | - | - | NRAS: p.Q61R/K; BRAF: p.V600E/D | NRAS: p.Q61K (4,8%); BRAF: p.V600D (2,6%) | sample not available | |
| 57-0002 | - | - | KRAS: p.A146P/T/V (3,1%) | KRAS: p.A146T | - | - | - | - |
| 57-0006 | - | - | - | - | KRAS: p.G12C | KRAS: p.G12C (4,3%) | - | - |

Table S2. mPFS observed between KRAS/NRAS/BRAF mutant versus wild type cases when considering patients mutant at baseline, at week 8, at progression or at any time-point.

| Samples | | N | MEDIAN PFS | P Value | Hazard Ratio (95% CI of Ratio) |
|----------------|-----|----|------------|---------|--------------------------------|
| T0 | WT | 31 | 7.250 | 0.5818 | 0.7625 (0.2904 to 2.002) |
| | MUT | 6 | 7.060 | | |
| T8 | WT | 25 | 7.590 | 0.8401 | 1.090 (0.4724 to 2.514) |
| | MUT | 7 | 6.670 | | |
| PD | WT | 23 | 7.130 | 0.3892 | 1.346 (0.6844 to 2.647) |
| | MUT | 13 | 7.710 | | |
| Any Time Point | WT | 17 | 7.130 | 0.5476 | 1.230 (0.6269 to 2.412) |
| | MUT | 20 | 7.470 | | |