

| Table S3A. Sequence Quality Data Metrics for Reference Samples |                                   |                        |         |              |                        |                            |                             |                               |                            |                    |
|----------------------------------------------------------------|-----------------------------------|------------------------|---------|--------------|------------------------|----------------------------|-----------------------------|-------------------------------|----------------------------|--------------------|
| Run Name                                                       | Sample                            | Sample Type            | DNA/RNA | Mapped reads | Mapped Reads On Target | Base Coverage (Mean Depth) | Uniformity of Base Coverage | Target base coverage at 100 X | Average reads per amplicon | Analysis included? |
| LOD 1-1                                                        | Hotspot ladder 6 (47.9%)          | FFPE                   | DNA     | 4,217,329    | 97.96%                 | 1,730                      | 95.42%                      | 99.10%                        | 1,633                      | YES                |
|                                                                | HD231 (50%)                       | FFPE                   | RNA     | 554,999      | 92.62%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 2-1                                                        | Hotspot ladder 5 (29.46%)         | FFPE                   | DNA     | 4,285,494    | 98.31%                 | 1,792                      | 95.95%                      | 98.66%                        | 1,665                      | YES                |
|                                                                | HD231 (20%)                       | FFPE                   | RNA     | 633,550      | 97.59%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 3-1                                                        | Hotspot ladder 4 (18.44%)         | FFPE                   | DNA     | 4,393,469    | 98.29%                 | 1,810                      | 96.08%                      | 98.64%                        | 1,707                      | YES                |
|                                                                | HD231 (10%)                       | FFPE                   | RNA     | 675,983      | 93.44%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 4-1                                                        | Hotspot ladder 3 (11.04%)         | FFPE                   | DNA     | 3,879,093    | 98.29%                 | 1,604                      | 96.18%                      | 98.58%                        | 1,507                      | YES                |
|                                                                | HD231 (5%)                        | FFPE                   | RNA     | 604,318      | 87.46%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 5-1                                                        | Hotspot ladder 2 (5.36%)          | FFPE                   | DNA     | 4,113,694    | 97.96%                 | 1,662                      | 95.65%                      | 98.57%                        | 1,593                      | YES                |
|                                                                | HD231 (2.5%)                      | FFPE                   | RNA     | 570,994      | 92.20%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 6-1                                                        | Hotspot ladder 1 (2.75%)          | FFPE                   | DNA     | 4,841,574    | 98.00%                 | 2,025                      | 95.38%                      | 98.53%                        | 1,875                      | YES                |
|                                                                | HD231 (1%)                        | FFPE                   | RNA     | 928,783      | 91.73%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 1-2                                                        | Hotspot ladder 6 (47.9%)          | FFPE                   | DNA     | 3,911,460    | 97.67%                 | 1,569                      | 95.22%                      | 98.97%                        | 1,510                      | YES                |
|                                                                | HD231 (50%)                       | FFPE                   | RNA     | 629,384      | 92.41%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 2-2                                                        | Hotspot ladder 5 (29.46%)         | FFPE                   | DNA     | 4,076,379    | 98.25%                 | 1,701                      | 95.97%                      | 98.48%                        | 1,583                      | YES                |
|                                                                | HD231 (20%)                       | FFPE                   | RNA     | 758,354      | 97.63%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 3-2                                                        | Hotspot ladder 4 (18.44%)         | FFPE                   | DNA     | 3,917,689    | 98.08%                 | 1,609                      | 96.04%                      | 98.56%                        | 1,519                      | YES                |
|                                                                | HD231 (10%)                       | FFPE                   | RNA     | 556,320      | 98.08%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 4-2                                                        | Hotspot ladder 3 (11.04%)         | FFPE                   | DNA     | 4,437,680    | 97.99%                 | 1,800                      | 96.17%                      | 98.64%                        | 1,719                      | YES                |
|                                                                | HD231 (5%)                        | FFPE                   | RNA     | 616,023      | 87.26%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 5-2                                                        | Hotspot ladder 2 (5.36%)          | FFPE                   | DNA     | 4,378,090    | 98.10%                 | 1,782                      | 95.47%                      | 98.68%                        | 1,698                      | YES                |
|                                                                | HD231 (2.5%)                      | FFPE                   | RNA     | 574,234      | 92.02%                 | -                          | -                           | -                             | -                          | YES                |
| LOD 6-2                                                        | Hotspot ladder 1 (2.75%)          | FFPE                   | DNA     | 3,878,493    | 97.58%                 | 1,599                      | 95.00%                      | 98.43%                        | 1,496                      | YES                |
|                                                                | HD231 (1%)                        | FFPE                   | RNA     | 426,013      | 91.58%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-1                                                          | Biochain Normal Male B903060      | FFPE                   | DNA     | 3,997,978    | 97.49%                 | 1,551                      | 96.32%                      | 98.68%                        | 1,541                      | YES                |
|                                                                | Biochain Normal Male B903060      | FFPE                   | RNA     | 76,797       | 37.26%                 | -                          | -                           | -                             | -                          | NO                 |
| ACR-2                                                          | Biochain Normal Male B903061      | FFPE                   | DNA     | 3,946,570    | 97.94%                 | 1,573                      | 96.39%                      | 98.46%                        | 1,528                      | YES                |
|                                                                | Biochain Normal Male B903061      | FFPE                   | RNA     | 1,004,065    | 99.03%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-3                                                          | Biochain Normal Male B903062      | FFPE                   | DNA     | 3,946,055    | 98.14%                 | 1,544                      | 95.51%                      | 98.23%                        | 1,531                      | YES                |
|                                                                | Biochain Normal Male B903062      | FFPE                   | RNA     | 735,082      | 99.51%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-4                                                          | Biochain Normal Male B903063      | FFPE                   | DNA     | 3,669,185    | 96.85%                 | 1,460                      | 96.26%                      | 98.24%                        | 1,405                      | YES                |
|                                                                | Biochain Normal Male B903063      | FFPE                   | RNA     | 671,829      | 93.01%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-5                                                          | Biochain Normal Male B903064      | FFPE                   | DNA     | 4,452,972    | 96.54%                 | 1,742                      | 96.73%                      | 98.69%                        | 1,699                      | YES                |
|                                                                | Biochain Normal Male B903064      | FFPE                   | RNA     | 981,926      | 98.90%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-6                                                          | Biochain Normal Male B903065      | FFPE                   | DNA     | 3,943,645    | 97.18%                 | 1,520                      | 94.92%                      | 98.05%                        | 1,515                      | YES                |
|                                                                | Biochain Normal Male B903065      | FFPE                   | RNA     | 884,843      | 99.24%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-7                                                          | Biochain Normal Male B903066      | FFPE                   | DNA     | 3,712,633    | 90.98%                 | 1,271                      | 83.06%                      | 94.09%                        | 1,335                      | NO                 |
|                                                                | Biochain Normal Male B903066      | FFPE                   | RNA     | 1,463,182    | 96.79%                 | -                          | -                           | -                             | -                          | NO                 |
| ACR-8                                                          | Biochain Normal Male B903067      | FFPE                   | DNA     | 3,598,199    | 97.79%                 | 1,419                      | 94.15%                      | 97.73%                        | 1,391                      | YES                |
|                                                                | Biochain Normal Male B903067      | FFPE                   | RNA     | 778,930      | 96.87%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-10                                                         | Biochain Normal Male B903069      | FFPE                   | DNA     | 5,450,955    | 97.77%                 | 2,143                      | 96.13%                      | 99.06%                        | 2,107                      | YES                |
|                                                                | Biochain Normal Male B903069      | FFPE                   | RNA     | 292,265      | 89.24%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-11                                                         | AcroMetrix MultiMix A             | FFPE                   | DNA     | 3,953,255    | 96.38%                 | 1,585                      | 95.17%                      | 97.76%                        | 1,506                      | YES                |
|                                                                | HD640 (22%)                       | FFPE                   | RNA     | 466,194      | 99.06%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-12                                                         | AcroMetrix MultiMix B             | FFPE                   | DNA     | 3,570,246    | 97.73%                 | 1,449                      | 88.00%                      | 95.60%                        | 1,379                      | YES                |
|                                                                | HD640 (10%)                       | FFPE                   | RNA     | 344,563      | 98.06%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-13                                                         | AcroMetrix MultiMix C             | FFPE                   | DNA     | 4,124,438    | 97.49%                 | 1,624                      | 87.52%                      | 96.16%                        | 1,589                      | YES                |
|                                                                | HD640 (5%)                        | FFPE                   | RNA     | 687,061      | 96.91%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-14                                                         | AcroMetrix MultiMix D             | FFPE                   | DNA     | 3,635,386    | 98.45%                 | 1,451                      | 89.83%                      | 96.17%                        | 1,415                      | YES                |
|                                                                | HD640 (2.5%)                      | FFPE                   | RNA     | 930,019      | 95.61%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-15                                                         | AcroMetrix MultiMix E             | FFPE                   | DNA     | 3,155,119    | 96.97%                 | 1,271                      | 91.93%                      | 96.61%                        | 1,209                      | YES                |
|                                                                | HD640 (1%)                        | FFPE                   | RNA     | 1,277,689    | 94.86%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-16                                                         | AcroMetrix MultiMix F             | FFPE                   | DNA     | 4,665,547    | 97.24%                 | 1,915                      | 89.55%                      | 97.18%                        | 1,793                      | YES                |
|                                                                | HD615 (63%)                       | FFPE                   | RNA     | 1,158,840    | 98.80%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-17                                                         | AcroMetrix MultiMix G             | FFPE                   | DNA     | 4,297,370    | 96.91%                 | 1,765                      | 95.45%                      | 98.26%                        | 1,646                      | YES                |
|                                                                | HD615 (30%)                       | FFPE                   | RNA     | 576,743      | 97.42%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-18                                                         | AcroMetrix MultiMix H             | FFPE                   | DNA     | 3,760,968    | 97.18%                 | 1,532                      | 96.22%                      | 98.34%                        | 1,445                      | YES                |
|                                                                | HD615 (10%)                       | FFPE                   | RNA     | 506,674      | 98.18%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-20                                                         | AcroMetrix Cancer hotspot control | FFPE                   | DNA     | 5,306,272    | 90.15%                 | 2,012                      | 97.51%                      | 99.24%                        | 1,891                      | YES                |
|                                                                | HD615 (5%)                        | FFPE                   | RNA     | 438,052      | 95.46%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-21                                                         | Horizon Dx EGFR multiplex         | FFPE                   | DNA     | 4,153,896    | 93.99%                 | 1,614                      | 96.81%                      | 98.77%                        | 1,543                      | YES                |
|                                                                | HD615 (2.5%)                      | FFPE                   | RNA     | 416,288      | 89.29%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-30                                                         | CDX143                            | FFPE                   | DNA     | 3,175,188    | 96.81%                 | 1,248                      | 97.35%                      | 98.80%                        | 1,215                      | YES                |
|                                                                | CDX143                            | FFPE                   | RNA     | 564,819      | 98.61%                 | -                          | -                           | -                             | -                          | YES                |
| ACR-31                                                         | CDX198                            | FFPE                   | DNA     | 3,674,808    | 96.10%                 | 1,457                      | 95.62%                      | 98.12%                        | 1,396                      | YES                |
|                                                                | CDX198                            | FFPE                   | RNA     | 463,517      | 98.76%                 | -                          | -                           | -                             | -                          | YES                |
| PRE-3                                                          | RM8398                            | Fresh cell culture DNA | DNA     | 4,208,342    | 97.50%                 | 1,691                      | 94.24%                      | 98.09%                        | 1,622                      | YES                |
|                                                                | HD615 (63%)                       | FFPE                   | RNA     | 521,465      | 97.76%                 | -                          | -                           | -                             | -                          | YES                |
| PRE-2/INF-5                                                    | RM8398                            | Fresh cell culture DNA | DNA     | 3,820,056    | 97.87%                 | 1,552                      | 95.10%                      | 98.35%                        | 1,478                      | YES                |
|                                                                | HD615 (63%)                       | FFPE                   | RNA     | 742,233      | 98.47%                 | -                          | -                           | -                             | -                          | YES                |
| RPD-1/ACR-19                                                   | QM                                | FFPE                   | DNA     | 4,142,843    | 97.70%                 | 1,685                      | 95.34%                      | 99.11%                        | 1,600                      | YES                |
|                                                                | HD 640 (2.5%)                     | FFPE                   | RNA     | 793,602      | 96.83%                 | -                          | -                           | -                             | -                          | YES                |
| RPD-2                                                          | QM                                | FFPE                   | DNA     | 4,186,482    | 97.18%                 | 1,717                      | 54.53%                      | 67.05%                        | 1,608                      | YES                |
|                                                                | HD 640 (2.5%)                     | FFPE                   | RNA     | 742,897      | 94.98%                 | -                          | -                           | -                             | -                          | YES                |
| RPD-3                                                          | QM                                | FFPE                   | DNA     | 3,141,854    | 97.33%                 | 1,271                      | 96.93%                      | 98.69%                        | 1,209                      | YES                |
|                                                                | HD 640 (2.5%)                     | FFPE                   | RNA     | 1,471,997    | 94.57%                 | -                          | -                           | -                             | -                          | YES                |
| INF-4                                                          | RM8398 1% EtOH                    | Fresh cell culture DNA | DNA     | 3,936,222    | 96.54%                 | 1,573                      | 90.81%                      | 96.73%                        | 1,502                      | YES                |
|                                                                | HD615 (63%) 1% EtOH               | FFPE                   | RNA     | 379,498      | 85.19%                 | -                          | -                           | -                             | -                          | YES                |
| INF-3                                                          | RM8398 5% EtOH                    | Fresh cell culture DNA | DNA     | 3,765,704    | 92.72%                 | 1,348                      | 45.13%                      | 50.72%                        | 1,380                      | YES                |
|                                                                | HD615 (63%) 5% EtOH               | FFPE                   | RNA     | 284,391      | 85.61%                 | -                          | -                           | -                             | -                          | YES                |
| INF-9                                                          | HC-C511                           | FFPE                   | DNA     | 4,428,736    | 93.53%                 | 1,703                      | 92.52%                      | 98.19%                        | 1,637                      | YES                |
|                                                                | RNA multiplex                     | FFPE                   | RNA     | 60,945       | 97.67%                 | -                          | -                           | -                             | -                          | YES                |
| INF-10                                                         | HC-C511 1% EtOH                   |                        |         |              |                        |                            |                             |                               |                            |                    |



Table S3B. Sequence Quality data metrics for patient samples sequenced

| Sample           | Age | Gender | Site                         | Cancer Type                                            | Final Tumor cellularity | Sample Type | DNA/RNA | Mapped Reads | Mapped Reads on Target | Base Coverage (Mean Depth) | Uniformity of Base Coverage | Target base coverage at 100 X | Average Reads per Amplicon |
|------------------|-----|--------|------------------------------|--------------------------------------------------------|-------------------------|-------------|---------|--------------|------------------------|----------------------------|-----------------------------|-------------------------------|----------------------------|
| CDX-180 Fz       | 58  | F      | Liver                        | RCC, metastasis                                        | 50%                     | Frozen      | DNA     | 4,111,791    | 98.05%                 | 1,668                      | 94.31%                      | 98.58%                        | 1,594                      |
| CDX-180 Fz       | 58  | F      | Liver                        | RCC, metastasis                                        | 50%                     | Frozen      | RNA     | 963,887      | 98.56%                 | -                          | -                           | -                             | -                          |
| CDX-182 Fz       | 57  | F      | Lymph node                   | RCC, metastasis                                        | 90%                     | Frozen      | DNA     | 5,026,122    | 97.74%                 | 2,071                      | 96.87%                      | 93.37%                        | 1,588                      |
| CDX-182 Fz       | 57  | F      | Lymph node                   | RCC, metastasis                                        | 90%                     | Frozen      | RNA     | 779,668      | 97.93%                 | -                          | -                           | -                             | -                          |
| CDX-201 Fz       | 67  | F      | Liver                        | Colon                                                  | 70%                     | Frozen      | DNA     | 4,640,322    | 97.55%                 | 1,908                      | 97.46%                      | 99.41%                        | 1,789                      |
| CDX-201 Fz       | 67  | F      | Liver                        | Colon                                                  | 70%                     | Frozen      | RNA     | 482,805      | 95.97%                 | -                          | -                           | -                             | -                          |
| CDX-202 Fz       | 63  | F      | Liver                        | Uterine                                                | 50%                     | Frozen      | DNA     | 4,311,559    | 98.36%                 | 1,759                      | 91.36%                      | 98.11%                        | 1,676                      |
| CDX-202 Fz       | 63  | F      | Liver                        | Uterine                                                | 50%                     | Frozen      | RNA     | 477,400      | 95.98%                 | -                          | -                           | -                             | -                          |
| CDX-203 Fz       | 86  | M      | Bladder                      | Bladder cancer                                         | 80%                     | Frozen      | DNA     | 3,755,514    | 97.59%                 | 1,508                      | 94.83%                      | 98.13%                        | 1,449                      |
| CDX-203 Fz       | 86  | M      | Bladder                      | Bladder cancer                                         | 80%                     | Frozen      | RNA     | 533,184      | 95.81%                 | -                          | -                           | -                             | -                          |
| CDX-204 Fz       | 69  | M      | Renal Fossa                  | RCC                                                    | 80%                     | Frozen      | DNA     | 3,979,239    | 98.20%                 | 1,612                      | 96.38%                      | 99.02%                        | 1,545                      |
| CDX-204 Fz       | 69  | M      | Renal Fossa                  | RCC                                                    | 80%                     | Frozen      | RNA     | 512,878      | 97.30%                 | -                          | -                           | -                             | -                          |
| CDX-211 Fz       | 69  | M      | Liver                        | Colorectal cancer with liver metastasis                | 80%                     | Frozen      | DNA     | 3,532,912    | 97.36%                 | 1,421                      | 96.27%                      | 99.16%                        | 1,360                      |
| CDX-211 Fz       | 69  | M      | Liver                        | Colorectal cancer with liver metastasis                | 80%                     | Frozen      | RNA     | 670,683      | 99.47%                 | -                          | -                           | -                             | -                          |
| CDX-248          | 61  | M      | Liver                        | Pancreatic cancer with Liver metastasis                | 90%                     | FFPE        | DNA     | 4,303,544    | 96.96%                 | 1,749                      | 95.65%                      | 98.98%                        | 1,649                      |
| CDX-248          | 61  | M      | Liver                        | Pancreatic cancer with Liver metastasis                | 90%                     | FFPE        | RNA     | 508,246      | 96.51%                 | -                          | -                           | -                             | -                          |
| CDX-249          | 67  | F      | Pancrease/ Liver             | Pancreatic cancer with Omentum metastasis              | 20%                     | FFPE        | DNA     | 4,551,557    | 98.33%                 | 1,847                      | 93.94%                      | 98.31%                        | 1,769                      |
| CDX-249          | 67  | F      | Pancrease/ Liver             | Pancreatic cancer with Omentum metastasis              | 20%                     | FFPE        | RNA     | 752,609      | 97.35%                 | -                          | -                           | -                             | -                          |
| CDX-251 Fz       | 65  | F      | Mesenteric nodule            | Pancreatic                                             | 60%                     | Frozen      | DNA     | 5,305,112    | 97.81%                 | 2,190                      | 95.58%                      | 100.00%                       | 2,051                      |
| CDX-251 Fz       | 65  | F      | Mesenteric nodule            | Pancreatic                                             | 60%                     | Frozen      | RNA     | 533,542      | 99.38%                 | -                          | -                           | -                             | -                          |
| CDX-254          | 79  | M      | R shoulder                   | High Grade Sarcoma                                     | 90%                     | FFPE        | DNA     | 4,250,799    | 98.04%                 | 1,726                      | 83.40%                      | 94.48%                        | 1,647                      |
| CDX-254          | 79  | M      | R shoulder                   | High Grade Sarcoma                                     | 90%                     | FFPE        | RNA     | 720,777      | 98.67%                 | -                          | -                           | -                             | -                          |
| CDX-255          | 56  | F      | Peritoneum                   | Metastatic Adenocarcinoma                              | 60%                     | FFPE        | DNA     | 3,781,921    | 95.03%                 | 1,476                      | 93.28%                      | 97.73%                        | 1,421                      |
| CDX-255          | 56  | F      | Peritoneum                   | Metastatic Adenocarcinoma                              | 60%                     | FFPE        | RNA     | 841,131      | 99.74%                 | -                          | -                           | -                             | -                          |
| CDX-256          | 62  | F      | R Plural Space               | Adenocarcinoma of the Lung                             | 70%                     | FFPE        | DNA     | 3,705,878    | 93.20%                 | 1,426                      | 92.78%                      | 98.21%                        | 1,365                      |
| CDX-256          | 62  | F      | R Plural Space               | Adenocarcinoma of the Lung                             | 70%                     | FFPE        | RNA     | 910,975      | 99.32%                 | -                          | -                           | -                             | -                          |
| CDX-259          | 74  | M      | Lung/Liver                   | Signet ring Mucinous carcinoma                         | 90%                     | FFPE        | DNA     | 4,209,459    | 95.38%                 | 1,669                      | 94.93%                      | 98.23%                        | 1,587                      |
| CDX-259          | 74  | M      | Lung/Liver                   | Signet ring Mucinous carcinoma                         | 90%                     | FFPE        | RNA     | 498,390      | 98.83%                 | -                          | -                           | -                             | -                          |
| CDX-268          | 42  | F      | R Lung                       | Non Small Cell Carcinoma                               | 70%                     | FFPE        | DNA     | 4,504,979    | 97.26%                 | 1,759                      | 87.66%                      | 95.74%                        | 1,732                      |
| CDX-268          | 42  | F      | R Lung                       | Non Small Cell Carcinoma                               | 70%                     | FFPE        | RNA     | 892,630      | 99.17%                 | -                          | -                           | -                             | -                          |
| CDX-270          | 75  | F      | L Pelvis                     | Poorly Differentiated carcinoma                        | 70%                     | FFPE        | DNA     | 4,088,631    | 97.51%                 | 1,671                      | 95.52%                      | 99.07%                        | 1,576                      |
| CDX-270          | 75  | F      | L Pelvis                     | Poorly Differentiated carcinoma                        | 70%                     | FFPE        | RNA     | 206,771      | 98.67%                 | -                          | -                           | -                             | -                          |
| CDX-274          | 63  | M      | Prostate                     | Adenocarcinoma                                         | 60%                     | FFPE        | DNA     | 5,190,769    | 98.64%                 | 2,056                      | 83.87%                      | 95.62%                        | 2,024                      |
| CDX-274          | 63  | M      | Prostate                     | Adenocarcinoma                                         | 60%                     | FFPE        | RNA     | 166,165      | 98.04%                 | -                          | -                           | -                             | -                          |
| CDX-280          | 65  | F      | Gallbladder                  | Invasive Adenocarcinoma                                | 80%                     | FFPE        | DNA     | 3,351,351    | 97.91%                 | 1,326                      | 94.08%                      | 97.80%                        | 1,297                      |
| CDX-280          | 65  | F      | Gallbladder                  | Invasive Adenocarcinoma                                | 80%                     | FFPE        | RNA     | 914,513      | 97.16%                 | -                          | -                           | -                             | -                          |
| CDX-281          | 69  | M      | Cecum                        | Invasive Adenocarcinoma                                | 90%                     | FFPE        | DNA     | 3,925,923    | 97.24%                 | 1,551                      | 94.96%                      | 98.66%                        | 1,509                      |
| CDX-281          | 69  | M      | Cecum                        | Invasive Adenocarcinoma                                | 90%                     | FFPE        | RNA     | 558,255      | 98.20%                 | -                          | -                           | -                             | -                          |
| CDX-287          | 67  | F      | R Colon                      | Metastatic Adenocarcinoma                              | 80%                     | FFPE        | DNA     | 3,689,410    | 97.77%                 | 1,467                      | 94.89%                      | 98.51%                        | 1,426                      |
| CDX-287          | 67  | F      | R Colon                      | Metastatic Adenocarcinoma                              | 80%                     | FFPE        | RNA     | 1,001,493    | 98.35%                 | -                          | -                           | -                             | -                          |
| CDX-304          | 49  | F      | L Parietal Occipital         | Hemangiopericytoma                                     | 95%                     | FFPE        | DNA     | 3,926,703    | 96.59%                 | 1,624                      | 95.90%                      | 98.77%                        | 1,499                      |
| CDX-304          | 49  | F      | L Parietal Occipital         | Hemangiopericytoma                                     | 95%                     | FFPE        | RNA     | 720,748      | 97.25%                 | -                          | -                           | -                             | -                          |
| CDX-310          | 75  | M      | Superficial Bladder wall     | Papillary Transitional Cell Carcinoma (Bladder)        | 90%                     | FFPE        | DNA     | 3,168,211    | 95.78%                 | 1,214                      | 92.60%                      | 97.05%                        | 1,199                      |
| CDX-310          | 75  | M      | Superficial Bladder wall     | Papillary Transitional Cell Carcinoma (Bladder)        | 90%                     | FFPE        | RNA     | 225,672      | 97.94%                 | -                          | -                           | -                             | -                          |
| CDX-311          | 51  | F      | Liver                        | Poorly Differentiated Metastatic Adenocarcinoma        | 60%                     | FFPE        | DNA     | 4,696,329    | 97.09%                 | 1,886                      | 96.10%                      | 98.89%                        | 1,802                      |
| CDX-311          | 51  | F      | Liver                        | Poorly Differentiated Metastatic Adenocarcinoma        | 60%                     | FFPE        | RNA     | 452,349      | 99.50%                 | -                          | -                           | -                             | -                          |
| CDX-317 RNA only | 32  | F      | Liver                        | Metastatic Adenocarcinoma                              | 60%                     | FFPE        | RNA     | 376,460      | 99.63%                 | -                          | -                           | -                             | -                          |
| CDX-318          | 68  | M      | R Lung                       | Pulmonary Adnenocarcinoma                              | 40%                     | FFPE        | DNA     | 4,426,678    | 98.08%                 | 1,802                      | 95.24%                      | 99.00%                        | 1,716                      |
| CDX-318          | 68  | M      | R Lung                       | Pulmonary Adnenocarcinoma                              | 40%                     | FFPE        | RNA     | 356,544      | 99.54%                 | -                          | -                           | -                             | -                          |
| CDX-319          | 54  | F      | T4 Tumor                     | Hemangiopericytoma                                     | 100%                    | FFPE        | DNA     | 4,588,626    | 97.33%                 | 1,862                      | 95.36%                      | 99.03%                        | 1,765                      |
| CDX-319          | 54  | F      | T4 Tumor                     | Hemangiopericytoma                                     | 100%                    | FFPE        | RNA     | 599,149      | 99.35%                 | -                          | -                           | -                             | -                          |
| CDX-323          | 75  | M      | R. upper lobe of lung        | Adnenocarcinoma                                        | 70%                     | FFPE        | DNA     | 4,421,967    | 98.20%                 | 1,793                      | 93.68%                      | 97.74%                        | 1,716                      |
| CDX-323          | 75  | M      | R. upper lobe of lung        | Adnenocarcinoma                                        | 70%                     | FFPE        | RNA     | 646,464      | 98.39%                 | -                          | -                           | -                             | -                          |
| CDX-326          | 92  | M      | Left Axillary Lymph node     | Metastatic Lung Adenocarcinoma                         | 80%                     | FFPE        | DNA     | 4,990,568    | 98.11%                 | 2,061                      | 95.32%                      | 98.88%                        | 1,935                      |
| CDX-326          | 92  | M      | Left Axillary Lymph node     | Metastatic Lung Adenocarcinoma                         | 80%                     | FFPE        | RNA     | 966,987      | 99.42%                 | -                          | -                           | -                             | -                          |
| CDX-336 RNA only | 78  | M      | R Lung                       | NSCLC/Poorly differentiated adenocarcinoma             | 80%                     | FFPE        | RNA     | 276,198      | 99.19%                 | -                          | -                           | -                             | -                          |
| CDX-338          | 67  | F      | Distal Descending Colon      | Moderatley Well Diiferentiated Invasive Adenocarcinoma | 80%                     | FFPE        | DNA     | 3,865,647    | 97.92%                 | 1,543                      | 93.39%                      | 98.10%                        | 1,496                      |
| CDX-338          | 67  | F      | Distal Descending Colon      | Moderatley Well Diiferentiated Invasive Adenocarcinoma | 80%                     | FFPE        | RNA     | 888,923      | 97.83%                 | -                          | -                           | -                             | -                          |
| CDX-347          | 56  | M      | Rectum                       | Moderatley Diiferentiated Invasive Adenocarcinoma      | 90%                     | FFPE        | DNA     | 3,898,937    | 97.47%                 | 1,575                      | 95.37%                      | 98.29%                        | 1,502                      |
| CDX-347          | 56  | M      | Rectum                       | Moderatley Diiferentiated Invasive Adenocarcinoma      | 90%                     | FFPE        | RNA     | 927,150      | 99.14%                 | -                          | -                           | -                             | -                          |
| CDX-355          | 68  | F      | Uterus                       | Endometrial Adenocarcinoma                             | 85%                     | FFPE        | DNA     | 3,872,785    | 97.23%                 | 1,542                      | 95.63%                      | 99.63%                        | 1,488                      |
| CDX-355          | 68  | F      | Uterus                       | Endometrial Adenocarcinoma                             | 85%                     | FFPE        | RNA     | 658,738      | 99.01%                 | -                          | -                           | -                             | -                          |
| CDX-361          | 79  | F      | R Breast                     | Diffuse large B cell Lymphoma                          | 90%                     | FFPE        | DNA     | 3,114,581    | 96.32%                 | 1,235                      | 95.34%                      | 98.76%                        | 1,186                      |
| CDX-361          | 79  | F      | R Breast                     | Diffuse large B cell Lymphoma                          | 90%                     | FFPE        | RNA     | 472,663      | 98.61%                 | -                          | -                           | -                             | -                          |
| CDX143           | NA  | M      |                              |                                                        |                         | FFPE        | DNA     | 3,175,188    | 96.81%                 | 1,248                      | 97.35%                      | 98.80%                        | 1,215                      |
| CDX143           | NA  | M      |                              |                                                        |                         | FFPE        | RNA     | 564,819      | 98.61%                 | -                          | -                           | -                             | -                          |
| CDX198           | NA  | M      | Lymph Nodes chest and L Neck | Metatatic Melanoma                                     | 95%                     | FFPE        | DNA     | 3,674,808    | 96.10%                 | 1,457                      | 95.62%                      | 98.12%                        | 1,396                      |
| CDX198           | NA  | M      | Lymph Nodes chest and L Neck | Metatatic Melanoma                                     | 95%                     | FFPE        | RNA     | 463,517      | 98.76%                 | -                          | -                           | -                             | -                          |
| RDX-1            | NA  | F      | Endobronchial lung bx        | Met Clear Cell RCC                                     | 80%                     | Frozen      | DNA     | 4,144,225    | 97.57%                 | 1,675                      | 90.14%                      | 97.04%                        | 1,598                      |
| RDX-1            | NA  | F      | Endobronchial lung bx        | Met Clear Cell RCC                                     | 80%                     | Frozen      | RNA     | 791,942      | 98.63%                 | -                          | -                           | -                             | -                          |
| RDX-11           | NA  | M      | L2 Vertebral Boody           | RCC, Bone Metastasis                                   | 75%                     | Frozen      | DNA     | 5,158,153    | 97.25%                 | 2,094                      | 96.24%                      | 99.22%                        | 1,983                      |
| RDX-11           | NA  | M      | L2 Vertebral Boody           | RCC, Bone Metastasis                                   | 75%                     | Frozen      | RNA     | 172,353      | 97.13%                 | -                          | -                           | -                             | -                          |
| RDX-12           | NA  | M      | Lung                         | Prostatic Adenocarcinoma                               | 70%                     | Frozen      | DNA     | 4,263,647    | 98.03%                 | 1,735                      | 96.01%                      | 98.99%                        | 1,652                      |
| RDX-12           | NA  | M      | Lung                         | Prostatic Adenocarcinoma                               | 70%                     | Frozen      | RNA     | 338,449      | 99.06%                 | -                          | -                           | -                             | -                          |
| RDX-13           | NA  | F      | R. Iliac Bone                | Breast Carcinoma                                       | 10%                     | Frozen      | DNA     | 3,916,327    | 97.46%                 | 1,592                      | 97.17%                      | 99.15%                        | 1,509                      |
| RDX-13           | NA  | F      | R. Iliac Bone                | Breast Carcinoma                                       | 10%                     | Frozen      | RNA     | 660,515      | 96.83%                 | -                          | -                           | -                             | -                          |
| RDX-16           | NA  | NA     | Liver core                   | CRC, Liver Met                                         | 70%                     | Frozen      | DNA     | 5,325,118    | 97.31%                 | 2,125                      | 91.66%                      | 98.88%                        | 2,048                      |
| RDX-16           | NA  | NA     | Liver core                   | CRC, Liver Met                                         | 70%                     | Frozen      | RNA     | 146,842      | 98.24%                 | -                          | -                           | -                             | -                          |
| RDX-18           | NA  | M      | R. Kidney                    | RCC                                                    | 80%                     | Frozen      | DNA     | 2,937,743    | 97.53%                 | 1,194                      | 96.18%                      | 98.60%                        | 1,132                      |
| RDX-18           | NA  | M      | R. Kidney                    | RCC                                                    | 80%                     | Frozen      | RNA     | 1,585,391    | 97.71%                 | -                          | -                           | -                             | -                          |
| RDX-19           | NA  | NA     | Right submandibular          | Squamous Cell Carcinoma                                | 50%                     | Frozen      | DNA     | 4,117,819    | 96.90%                 | 1,634                      | 92.17%                      | 98.17%                        | 1,577                      |
| RDX-19           | NA  | NA     | Right submandibular          | Squamous Cell Carcinoma                                | 50%                     | Frozen      | RNA     | 290,991      | 99.20%                 | -                          | -                           | -                             | -                          |
| RDX-2            | NA  | F      | TBNA-4R                      | RCC                                                    | 60%                     | Frozen      | DNA     | 3,447,419    | 96.93%                 | 1,385                      | 96.15%                      | 99.13%                        | 1,321                      |
| RDX-2            | NA  | F      | TBNA-4R                      | RCC                                                    | 60%                     | Frozen      | RNA     | 393,494      | 97.62%                 | -                          | -                           | -                             | -                          |
| RDX-20           | NA  | M      | Lung transbronchial          | RCC                                                    | 50%                     | Frozen      | DNA     | 4,306,379    | 98.42%                 | 1,780                      | 94.22%                      | 98.55%                        | 1,675                      |
| RDX-20           | NA  | M      | Lung transbronchial          | RCC                                                    | 50%                     | Frozen      | RNA     | 813,505      | 98.62%                 | -                          | -                           | -                             | -                          |
| RDX-3            | NA  | F      | Lymph node                   | Met Breast Carcinoma                                   | 70%                     | Frozen      | DNA     | 3,492,407    | 96.07%                 | 1,380                      | 96.18%                      | 98.70%                        | 1,326                      |
| RDX-3            | NA  | F      | Lymph node                   | Met Breast Carcinoma                                   | 70%                     | Frozen      | RNA     | 629,077      | 98.84%                 | -                          | -                           | -                             | -                          |
| RDX-4            | NA  | M      | Lung                         | Met, Clear Cell RCC                                    | 90%                     | Frozen      | DNA     | 4,064,513    | 97.05%                 | 1,647                      | 95.12%                      | 98.29%                        | 1,559                      |
| RDX-4            | NA  | M      | Lung                         | Met, Clear Cell RCC                                    | 90%                     | Frozen      | RNA     | 918,031      | 99.02%                 | -                          | -                           | -                             | -                          |
| RDX-5            | NA  | M      | Liver                        | Prostate                                               | 80%                     | Frozen      | DNA     | 2,547,316    | 95.94%                 | 987.7                      | 96.11%                      | 98.31%                        | 965.9                      |
| RDX-5            | NA  | M      | Liver                        | Prostate                                               | 80%                     | Frozen      | RNA     | 84,710       | 70.14%                 | -                          | -                           | -                             | -                          |
| RDX-6            | NA  | M      | 11R Lymph Node               | Clear Cell RCC                                         | 50%                     | Frozen      | DNA     | 3,782,166    | 97.41%                 | 1,541                      | 94.68%                      | 98.71%                        | 1,456                      |
| RDX-6            | NA  | M      | 11R Lymph Node               | Clear Cell RCC                                         | 50%                     | Frozen      | RNA     | 748,392      | 84.21%                 | -                          | -                           | -                             | -                          |
| RDX-8            | NA  | M      | Lung                         | Renal Collecting Duct Cell Carcinoma, Met              | 100%                    | Frozen      | DNA     | 3,368,903    | 97.42%                 | 1,346                      | 92.86%                      | 97.69%                        | 1,297                      |
| RDX-8            | NA  | M      | Lung                         | Renal Collecting Duct Cell Carcinoma, Met              | 100%                    | Frozen      | RNA     | 371,926      | 98.50%                 | -                          | -                           | -                             | -                          |
| RDX-9            | NA  | M      | R. Kidney                    | Clear Cell RCC                                         | 100%                    | Frozen      | DNA     | 3,795,534    | 97.07%                 | 1,543                      | 96.00%                      | 98.93%                        | 1,456                      |
| RDX-9            | NA  | M      | R. Kidney                    | Clear Cell RCC                                         | 100%                    | Frozen      | RNA     | 135,610      | 64.69%                 | -                          | -                           | -                             | -                          |
| RDX-22           | NA  | M      | Left Kidney                  | RCC                                                    | 90%                     | Frozen      | DNA     | 3,104,359    | 97.22%                 | 1,262                      | 96.39%                      | 98.82%                        | 1,193                      |
| RDX-22           | NA  | M      | Left Kidney                  | RCC                                                    | 90%                     | Frozen      | RNA     | 621,200      | 96.22%                 | -                          | -                           | -                             | -                          |
| RDX-24           | NA  | M      | TBNA subcranial LN           | RCC                                                    | 90%                     | Frozen      | DNA     | 2,848,675    | 97.77%                 | 1,130                      | 91.73%                      | 96.96%                        | 1,101                      |
| RDX-24           | NA  | M      | TBNA subcranial LN           | RCC                                                    | 90%                     | Frozen      | RNA     | 813,980      | 97.42%                 |                            |                             |                               |                            |
| RDX-25           | NA  | M      | Lung                         | Prostate                                               | 90%                     | Frozen      | DNA     | 3,658,129    | 96.38%                 | 1,481                      | 94.39%                      | 98.54%                        | 1,394                      |
| RDX-25           | NA  | M      | Lung                         | Prostate                                               | 90%                     | Frozen      | RNA     | 684,069      | 99.05%                 | -                          | -                           | -                             | -                          |