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**Table 1. List of all cases with clinically relevant fusions detected by the next-generation sequencing assay.**

No.	Specimen type	Site	Tumor type	Fusions detected	FISH results available (Yes)
1	Cytology	Lung	Non-small cell carcinoma	<i>MET</i> exon 14 skipping mutation	No
2	Cytology	LN, neck	Poorly differentiated thyroid carcinoma	<i>NCOA4-RET</i>	Yes
3	Cytology	Pleural fluid	Adenocarcinoma	<i>NCOA4-RET</i>	No
4	Cytology	Lung	Non-small cell carcinoma	<i>MET</i> exon 14 skipping mutation	No
5	Biopsy	Lung	Adenocarcinoma	<i>AGK-BRAF</i>	No
6	Biopsy	Lung	Adenocarcinoma	<i>CD74-NRG1</i>	Yes
7	Biopsy	LN, lower paratracheal	Small cell carcinoma	<i>EGFR-SEPT14</i>	Yes
8	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	No
9	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	Yes
10	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	Yes
11	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	Yes
12	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	Yes
13	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	No
14	Biopsy	Bone	Adenocarcinoma	<i>EML4-ALK</i>	Yes
15	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	No
16	Biopsy	Lung	Adenocarcinoma	<i>EML4-ALK</i>	Yes
17	Biopsy	Chest wall	Carcinoma	<i>ESR1-CCDC170</i>	No
18	Biopsy	Pleura	Adenocarcinoma	<i>ETV6-NTRK3</i>	No
19	Biopsy	Lung	Adenocarcinoma	<i>FGFR3-TACC3</i>	No
20	Biopsy	Abdomen soft tissue	Anaplastic thyroid carcinoma	<i>IRF2BP2-NTRK1</i>	No
21	Biopsy	LN, left retroperitoneal	Adenocarcinoma	<i>KIF5B-RET</i>	No
22	Biopsy	Lung	Adenocarcinoma	<i>MET</i> exon 14 skipping mutation	Yes
23	Biopsy	Lung	Adenoid cystic carcinoma	<i>MYB-NFIB</i>	Yes
24	Biopsy	LN, left supraclavicular	Adenocarcinoma	<i>SDC4-ROS1</i>	Yes
25	Biopsy	Orbital apex	Papillary thyroid carcinoma	<i>SND1-BRAF</i>	No
26	Biopsy	Prostate	Adenocarcinoma	<i>TMPRSS2-ERG</i>	No
27	Biopsy	Pelvic soft tissue	Adenocarcinoma	<i>TMPRSS2-ERG</i>	No
28	Biopsy	Colon	Adenocarcinoma	<i>TPM3-NTRK1</i>	No
29	Resection	Thyroid	Papillary thyroid carcinoma	<i>CCDC6-RET</i>	No

30	Resection	Thyroid	Poorly differentiated thyroid carcinoma	<i>CCDC6-RET</i>	No
31	Resection	Lymph node, left neck	Anaplastic thyroid carcinoma	<i>CCDC6-RET</i>	No
32	Resection	Lung	Adenocarcinoma	<i>CD74-ROS1</i>	Yes
33	Resection	Soft tissue, neck	Poorly differentiated carcinoma	<i>EML4-ALK</i>	Yes
34	Resection	Lung	Combined Adenocarcinoma and NE carcinoma	<i>EML4-ALK</i>	Yes
35	Resection	Fallopian tube	High-grade serous carcinoma	<i>ESR1-MTHFD1L</i>	No
36	Resection	Trachea	Papillary thyroid carcinoma	<i>ETV6-NTRK3</i>	Yes
37	Resection	Liver	Papillary thyroid carcinoma	<i>ETV6-NTRK3</i>	No
38	Resection	Thyroid	Papillary thyroid carcinoma	<i>ETV6-NTRK3</i>	No
39	Resection	Parotid	Secretory carcinoma	<i>ETV6-NTRK3</i>	No
40	Resection	Brain	Primary neuroepithelial neoplasm	<i>FGFR3-TACC3</i>	No
41	Resection	Parotid	carcinoma	<i>FNDC3B-PIK3CA</i>	No
42	Resection	Brain	Pilocytic astrocytoma	<i>KIAA1549-BRAF</i>	No
43	Resection	Lung	Adenocarcinoma	<i>MET</i> exon 14 skipping mutation	No
44	Resection	Lung	Adenocarcinoma	<i>MET</i> exon 14 skipping mutation	Yes
45	Resection	Submandibular gland	Adenoid cystic carcinoma	<i>MYB-NFIB</i>	Yes
46	Resection	Lung	Papillary thyroid carcinoma	<i>NCOA4-RET</i>	No
47	Resection	Thyroid	Papillary thyroid carcinoma	<i>NCOA4-RET</i>	No
48	Resection	Thyroid	Papillary thyroid carcinoma	<i>TMP3-NTRK1</i>	Yes
49	Resection	Thyroid	Papillary thyroid carcinoma	<i>TRIM24-RET</i>	Yes
50	Resection	Thyroid	Undifferentiated carcinoma	<i>AGK-BRAF</i>	Yes

FISH indicates fluorescent in situ hybridization; LN, lymph node.