

**Table E1. Patient Demographics**

PET study #	Corresponding Figure #	Purpose	History	Regional PET findings (O: presence, X: absence)				
				Metastatic	Head/Neck	Chest	Abdomen/Pelvis	Musculo-skeletal Region
1	3a	Restaging	Urothelial cancer; post right nephrectomy	O	O	O	O	O
2	3b	Restaging	Advanced small cell lung cancer	X	O	X	X	X
3	3c	Restaging	Widespread metastatic disease	X	X	X	O	X
4	3d	Restaging	Metastatic breast cancer; post lumpectomy and irradiation	X	O	X	O	O
5	E3a	Staging	Squamous cell carcinoma	O	O	X	X	O
6	E3b	Restaging	Metastatic colon cancer; chemotherapy	X	O	O	X	O
7	E3c	Restaging	Hodgkin lymphoma	O	O	X	O	O
8	E3d	Restaging	Hodgkin lymphoma	O	X	X	X	O
9	E3e	Restaging	Parotid gland adenocarcinoma; perjeta/perceptin therapy	O	O	O	X	O
10	E3f	Restaging	Nasopharyngeal squamous cell carcinoma; chemoradiation therapy	O	X	O	O	O
11	4a (1)	Restaging	Metastatic urothelial carcinoma	X	O	X	X	O
12	4a (2)	Restaging	Metastatic bladder cancer; pembrolizumab therapy	X	O	X	X	O
13	4b (1)	Restaging	Metastatic breast cancer	X	O	X	X	O
14	4b (2)	Restaging	Metastatic breast cancer	X	O	X	X	O
15	4c	Staging	None	O	O	O	O	O
16	4d	Restaging	Li Fraumeni syndrome and osteosarcoma	O	O	X	O	O
17	5a	Restaging	Right lower lobe squamous cell carcinoma; chemoradiation	O	O	O	O	O
18	6a	Restaging	Stage IIIB cervical adenocarcinoma; radiation and chemotherapy	O	O	X	X	O
19	6b	Restaging	Metastatic breast cancer	X	O	X	X	X
20	6c	Restaging	Sarcoidosis	O	O	X	X	O
21	6d	Restaging	Metastatic breast cancer	X	O	X	O	X
22		Restaging	Right breast cancer; partial mastectomy; sigmoid colon cancer; resection and chemotherapy	O	X	X	X	O
23		Restaging	Bone marrow metastases	X	O	X	X	X
24		Restaging	Chronic lymphocytic leukemia	O	O	O	O	O
25		Restaging	Large B-cell lymphoma	O	X	X	O	O
26		Restaging	Metastatic colon cancer; palliative chemotherapy	X	X	O	X	O
27		Restaging	Metastatic duodenal adenocarcinoma; chemotherapy	X	X	X	X	O

28		Characterization	Intussusception and lymphadenopathy	O	O	O	X	O
29		Restaging	Pulmonary nodule	O	O	O	X	O
30		Staging	Pleomorphic undifferentiated sarcoma; chronic lymphocytic leukemia	O	O	X	X	X
31		Restaging	Melanoma	O	O	X	O	O
32		Restaging	Breast cancer	O	O	X	O	O
33		Restaging	Multiple myeloma	O	O	O	X	X
34		Characterization	Pulmonary nodule	O	O	O	O	O
35		Restaging	Dedifferentiated ameloblastic carcinoma; right inferior maxillectomy; adjuvant radiation therapy	O	X	O	O	O
36		Restaging	Metastatic breast cancer; left-sided partial mastectomy	X	X	O	X	X
37		Restaging	Metastatic melanoma; left upper lobectomy	X	X	O	X	O
38		Restaging	Metastatic breast cancer	X	X	X	X	X
39		Restaging	Breast cancer and thyroid cancer; right axillary dissection; thyroid cancer; hemithyroidectomy	O	X	X	O	O
40		Restaging	Diffuse large B cell lymphoma; chemotherapy	O	O	O	O	O
41		Restaging	Metastatic melanoma	X	O	O	O	O
42		Restaging	Melanoma	O	O	O	X	X
43		Restaging	Metastatic breast cancer; bladder and osseous metastases	X	O	O	O	X
44		Restaging	Hurthle cell thyroid cancer; thyroidectomy and radiation treatment	O	O	O	O	O
45		Characterization	Mass in the right obturator externus muscle on prostate	O	O	O	X	X
46		Staging	Gallstone pancreatitis; endoscopic retrograde cholangiopancreatography and cholecystectomy; colonic variant intestinal adenocarcinoma (gallbladder)	O	O	O	X	O
47		Characterization	Stage III C ovarian carcinoma	O	O	O	X	O
48		Restaging	Squamous cell carcinoma (cervix); radiation and chemotherapy	O	O	O	O	O
49		Restaging	Squamous cell carcinoma; thoracotomy	O	X	X	X	X
50		Restaging	Urothelial carcinoma; right laparoscopic nephroureterectomy	O	O	O	O	O
51		Characterization	Pulmonary ground glass nodule	O	O	O	O	O
52		Restaging	Uterine serous cancer; currently undergoing chemotherapy; hysterectomy and bilateral salpingo-oophorectomy	O	O	O	X	O
53		Restaging	Hodgkin lymphoma; chemotherapy	O	X	O	O	O
54		Restaging	Laryngeal cancer; laryngectomy and cervical lymph node dissection	O	X	X	X	O
55		Restaging	Fallopian tube cancer; splenectomy; olaparib therapy	O	O	O	X	O
56		Staging	Soft palate carcinoma	O	X	O	O	O
57		Restaging	Metastatic breast cancer	X	O	X	O	X
58		Restaging	Squamous cell carcinoma (tonsil); chemoradiation; neck dissection	O	X	O	O	O
59		Restaging	Intra-abdominal desmoplastic small round cell tumor	O	O	X	X	O
60		Restaging	Lung cancer; lobectomy	O	X	X	O	X

61		Staging	Endometrioid adenocarcinoma	O	O	X	X	X
62		Restaging	Medullary thyroid cancer; neck dissection	O	O	X	X	X
63		Restaging	Squamous carcinoma (nasopharynx)	O	O	X	O	O
64		Restaging	Cholangiocarcinoma; pembrolizumab therapy	O	O	X	X	X
65		Restaging	Anaplastic large cell lymphoma; chemotherapy	O	O	O	X	O
66		Restaging	Metastatic breast cancer; mastectomy; axillary lymph node dissection	X	O	X	X	O
67		Restaging	Metastatic chondrosarcoma	X	O	X	X	X
68		Restaging	Metastatic melanoma	X	O	O	X	O
69		Restaging	Metastatic lung cancer; chemoradiation	X	O	X	X	O
70		Staging	High-grade B cell lymphoma	O	X	X	X	X
71		Restaging	Endometrial cancer	O	O	X	X	O
72		Restaging	Stage IV lung adenocarcinoma; bilateral salpingo-oophorectomy	O	O	X	O	O
73		Restaging	Ovarian cancer	O	O	X	X	O
74		Restaging	Mantle cell lymphoma	O	O	O	O	O
75		Restaging	Metastatic lung adenocarcinoma; erlotinib therapy	X	O	O	X	O
76		Restaging	Cervical cancer; chemoradiation and brachytherapy	O	O	O	X	O
77		Staging	Poorly differentiated lung adenocarcinoma	O	X	X	O	O
78		Staging	Breast cancer	O	O	X	O	O
79		Restaging	Stage IV melanoma	O	X	O	X	X
80		Restaging	Metastatic breast cancer	X	O	X	X	O
81		Characterization	Right middle lobe pulmonary nodule; cholecystectomy	O	O	X	X	O
82		Restaging	Right renal urothelial carcinoma; nephroureterectomy	O	O	O	O	X
83		Restaging	Stage III B high-grade serous ovarian cancer	O	X	X	X	O
84		Restaging	Metastatic colorectal cancer	X	O	X	O	O
85		Restaging	Metastatic Merkel cell carcinoma	X	O	X	X	X
86		Restaging	Metastatic breast cancer; Post lumpectomy and radiation	X	X	X	X	X
87		Characterization	TB; Right breast cancer; mastectomy; left upper lobe resection; left thoracoplasty	O	X	O	O	O
88		Restaging	Metastatic breast cancer; right mastectomy; left mammoplasty	X	O	X	X	O
89		Restaging	Metastatic breast cancer	X	O	X	O	O
90		Restaging	Metastatic breast cancer	X	O	O	O	X
91		Restaging	Metastatic paraganglioma	X	O	X	X	X
92		Restaging	Lung adenocarcinoma	O	X	X	O	O
93		Restaging	Metastatic breast cancer	X	X	X	O	X
94		Restaging	Metastatic breast cancer	X	O	X	X	O
95		Restaging	Tumor; pulmonary mass resection	O	O	X	X	O

96		Characterization	Prostate cancer	O	O	X	O	O
97		Restaging	Metastatic melanoma	X	O	O	X	X
98		Restaging	Tonsil cancer; left tonsillectomy; neck dissection; reconstruction flap	O	X	O	O	O
99		Restaging	Esophageal squamous cell carcinoma; esophagectomy; chemoradiation	O	O	X	O	O
100		Restaging	Breast cancer	O	O	X	O	O
101		Restaging	Metastatic breast cancer; mastectomies; axillary lymph node dissection	X	O	X	O	X
102		Restaging	Diffuse large B-cell lymphoma	O	O	O	X	O
103		Restaging	Metastatic breast cancer; mastectomies; axillary lymph node dissection; irradiation therapy	X	O	O	O	O
104		Restaging	Metastatic breast cancer; lumpectomy; axillary lymph node dissection; irradiation therapy	X	X	X	X	X
105		Characterization	Rectal squamous cell carcinoma (jejunum and left liver); supracervical hysterectomy	O	O	O	O	O
106		Restaging	Left vocal cord squamous cell carcinoma; chemoradiation therapy	O	X	X	O	O
107		Staging	Right tongue carcinoma	O	X	O	O	O
108		Restaging	Metastatic breast cancer; radiation therapy	X	O	X	O	O
109		Restaging	Breast cancer; right partial mastectomy; axillary lymph node dissection	X	X	O	X	X
110		Restaging	Metastatic breast cancer	X	X	X	X	O
<b>Regional PET Findings from 110 Studies</b>				<b>41</b>	<b>32</b>	<b>63</b>	<b>60</b>	<b>31</b>
<b>Percentage (%)</b>				<b>37.3</b>	<b>29.1</b>	<b>57.3</b>	<b>54.5</b>	<b>28.2</b>