

**Supplementary Table S5. Treatment details**

Total number of cycles administered	138
Number of cycles per patient (median, range)	6 (2 – 22)
Number of patients with dose delay or hold	7
Number of patients with dose reduction	4
Number of patients in which atezolizumab was discontinued	1
Number of patients in which pertuzumab was discontinued	0
Number of patients in which trastuzumab was discontinued	0
<b>Reasons for atezolizumab dose delay, modification or hold*</b>	
Toxicity	10
Platelet count decreased	4
Diarrhea	2
Creatinine increased	1
Dyspnea	1
Heart failure	1
Lung infection	1
Pneumonitis	1
Scheduling problems	3
Patient Request	0
Patient Compliance	1
Others	2
<b>Reasons for pertuzumab dose delay, modification or hold</b>	
Toxicity	12
Diarrhea	4
Platelet count decreased	4
Anorexia	2
Creatinine increased	2
Nausea	2
Chills	1
Dry mouth	1
Dyspnea	1
Fatigue	1
Heart failure	1
Hyperglycemia	1
Lung infection	1
Rash, maculo-papular	1
Urinary frequency	1
Vomiting	1
Weight loss	1

Scheduling problems	4
Patient Request	0
Patient Compliance	1
Others	0
<b>Reasons for trastuzumab dose delay, modification or hold</b>	
Toxicity	10
Platelet count decreased	4
Anorexia	2
Creatinine increased	2
Diarrhea	2
Nausea	2
Chills	1
Dry mouth	1
Dyspnea	1
Fatigue	1
Heart failure	1
Hyperglycemia	1
Lung infection	1
Rash maculo-papular	1
Urinary frequency	1
Vomiting	1
Weight loss	1
Scheduling problems	6
Patient Request	0
Patient Compliance	1
Others	4

\* 15 cycles have dose hold, 1 cycle (case 7, cycle 13) has more than one reason