

SUPPLEMENTARY MATERIAL

Table S1. Patients’ characteristics treated with RDD and AI

Patient	Gender	Age	Disease	Culprit Drug	Referred from other hospitals	Initial reaction to culprit drug	Tryptase elevation#	IL-6 Elevation&	Phenotype	ST	Reaction during RDD without AI (if applicable) ***	Criteria for use of AI	Cumulative AI dose (mg)	AI max rate (mcg/min)	Adrenaline side effects	No DS with AI	Reaction during RDD with AI
1	F	66	Gynaecological cancer	Carboplatin	Yes	Grade 1* Grade 2**	No	Yes	MC/B	+	Recurrent reactions	1.2, 1.4	1.3	4.33	Transient increased heart rate	3	2 AU
2	F	60	Gynaecological cancer	Carboplatin	Yes	Grade 3* Grade 4**	UNK	UNK	MC/B	+++	Recurrent reactions	1.1, 1.2, 1.3, 1.4	1.8	7	None	6	2 AU
3	F	53	Gynaecological cancer	Cisplatin	No	Grade 2* Grade 3**	UNK	UNK	MC/B	+	Recurrent AF	1.1, 1.2, 1.3	0.6	2.67	None	2	None
4	F	39	Gynaecological cancer	Paclitaxel	No	Grade 3* Grade 3**	Yes	UNK	CR	-	Recurrent AF	1.2	0.2	4.67	None	2	None
5	M	43	Autoimmune disease	Rituximab	No	Grade 3* Grade 4**	Yes	Yes	MC/B	+	AF with severe upper airway compromise in step 8	1.1, 1.2, 1.3	1.5	6.67	None	6	None
6	F	51	Gynaecological cancer	Carboplatin	No	Grade 3* Grade 4**	Yes	UNK	MC/B	+++	AF in step 1	1.1, 1.2, 1.3	2	8.33	None	3	2 AU
7	F	41	Autoimmune disease	Rituximab	No	Grade 2* Grade 3**	Yes	Yes	MR	-	Recurrent reactions	1.2	0.8	7.33	None	2	None
8	F	48	Gynaecological cancer	Carboplatin	Yes	Grade 3* Grade 4**	UNK	Yes	MC/B	++	Recurrent AF	1.1, 1.2, 1.4	0.35	2.33	None	2	None
9	M	78	Haematological disease	Rituximab	No	Grade 3* Grade 4**	UNK	UNK	MR	-	Recurrent reactions	1.1, 1.2	0.5	2.67	None	2	2 AU
10	F	46	Breast cancer	Carboplatin	Yes	Grade 3* Grade 4**	UNK	UNK	MC/B	+++	AF in step 1	1.1, 1.2, 1.4	0.5	4.33	None	6	1 AU
11	F	69	Gynaecological cancer	Paclitaxel	No	Grade 3* Grade 4**	UNK	UNK	CR	-	AF in step 2	1.1, 1.2	1.8	2.67	Transient HBP, headache, trembling	4	1 AU
12	F	52	Gastrointestinal cancer	Oxaliplatin	No	Grade 2* Grade 2**	Yes	UNK	MC/B	+	Recurrent AF	1.2, 1.3	0.2	1.33	Transient tachycardia	6	None
13	F	52	Gynaecological cancer	Carboplatin	Yes	Grade 3* Grade 4**	Yes	UNK	MC/B	+++	AF in step 2	1.1, 1.2, 1.3, 1.4	1.8	7	Transient tachycardia	3	2 AU
14	M	70	Gastrointestinal cancer	Oxaliplatin	No	Grade 2* Grade 3**	UNK	UNK	MC/B	++	Recurrent reactions	1.2	1.2	4.67	None	2	None
15	F	50	Gynaecological cancer	Carboplatin	No	Grade 3* Grade 3**	No	UNK	MC/B	++	Recurrent AF	1.2	0.8	3.33	None	3	1 AU

16	M	49	Autoimmune disease	Rituximab	No	Grade 2* Grade 3**	UNK	UNK	CR	-	Recurrent reactions	1.2	0.8	8	None	3	None
17A	F	41	Autoimmune disease	Ofatumumab	No	Grade 3* Grade 3**	UNK	Yes	CR	-	Recurrent AF	1.2	0.84	5	None	13	1 AU
17B	F	41	Autoimmune disease	Rituximab	No	Grade 3* Grade 2**	UNK	UNK	CR	-	Recurrent reactions during RDD	1.2	0.8	7	None	8	1 CR
18	M	57	ENT cancer	Cetuximab	No	Grade 3* Grade 4**	Yes	UNK	MC/B	++	Recurrent reactions	1.1, 1.2, 1.3	0.2	2.67	None	4	2 AU
19	M	44	Autoimmune disease	Natalizumab	No	Grade 3* Grade 4**	Yes	Yes	MC/B	+	Recurrent reactions	1.1, 1.2, 1.3	0.96	6.33	None	4	2 AU
20	M	67	Endocrine cancer	Oxaliplatin	No	Grade 1* Grade 2**	Yes	UNK	MC/B	+++	Recurrent AF reactions during RDD	1.2, 1.3	0.8	6	None	3	1 AU
21	F	32	Autoimmune disease	Rituximab	No	Grade 3* Grade 4**	Yes	UNK	MR	-	AF in step 1	1.1, 1.2	0.45	2.67	None	1	None
22	F	62	Gastrointestinal cancer	Oxaliplatin	No	Grade 3* Grade 3**	No	UNK	MC/B	+	Recurrent AF	1.2	0.6	1.33	None	2	None
23	F	64	Gastrointestinal cancer	Oxaliplatin	No	Grade 2* Grade 2**	UNK	UNK	MC/B	+	Recurrent reactions	1.2	0.3	4	None	1	None
24	F	67	Gynaecological cancer	Carboplatin	Yes	Grade 2* Grade 2**	Yes	UNK	MC/B	+	Recurrent AF	1.2, 1.3, 1.4	0.4	4	None	3	1 AU
25	M	55	Haematological cancer	Rituximab	No	Grade 1* Grade 2**	UNK	UNK	MR	-	AF shock	1.2	0.58	4.67	None	3	None
26	F	73	Gynaecological cancer	Carboplatin	No	Grade 3* Grade 4**	NO	UNK	MC/B	+++	Recurrent reactions	1.1, 1.2	0.58	2	Tachycardia, trembling and hypertension	2 ****	1 AU
27	F	75	Breast cancer	Carboplatin	No	Grade 3* Grade 3**	Yes	UNK	MC/B	++	Recurrent AF	1.2, 1.3	0.36	0.67	None	2	1 AF grade 2*
28	F	71	Gynaecological cancer	Carboplatin	No	Grade 2* Grade 2**	Yes	UNK	MC/B	++	Recurrent AF	1.2, 1.3	0.39	2.67	None	1	None
29	F	54	Gastrointestinal cancer	Oxaliplatin	No	Grade 2* Grade 2**	UNK	UNK	MC/B	+	Recurrent reactions	1.2	0.70	1	None	5	1 AU
30	F	64	Gynaecological cancer	Paclitaxel	Yes	Grade 3* Grade 4**	Yes	UNK	MR	-	AF shock in step 10	1.1, 1.2	0.27	2.67	Trembling	8	None
31	F	60	Gynaecological cancer	Carboplatin	No	Grade 2* Grade 2**	No	Yes	MC/B	+	AF shock in step 10	1.2	0.54	4.67	None	2	2 AU
32	F	54	Gynaecological cancer	Doxorubicin	No	Grade 3* Grade 4**	No	No	CR	NP	AF shock in step 10	1.1, 1.2	1.04	1.33	None	1	None
33	F	34	Multiple sclerosis	Ocrelizumab	No	Grade 1* Grade 2**	No	Yes	MR	-	Recurrent reactions	1.2	0.34	2.67	None	3	None
34	F	61	Gastrointestinal cancer	Oxaliplatin	Yes	Grade 1* Grade 2**	Yes	Yes	MC/B	++	Recurrent reactions	1.2, 1.3, 1.4	0.76	5.33	None	2	1 AU
35	F	65	Gynaecological cancer	Carboplatin	No	Grade 3* Grade 4**	UNK	UNK	MC/B	++	Recurrent AF	1.1, 1.2	0.14	4	None	6	1 AU
36	F	62	Gynaecological cancer	Carboplatin	No	Grade 1* Grade 2**	No	UNK	MC/B	+++	Recurrent AF	1.2	0.92	1.33	None	2	2 AU

37	F	60	Gynaecological cancer	Paclitaxel	No	Grade 3* Grade 4**	Yes	Yes	MR	+	Recurrent AF	1.1, 1.2, 1.3	1.62	2.67	None	3	2 AU
38	F	69	Breast cancer	Paclitaxel	Yes	Grade 3* Grade 4**	No	UNK	MR	-	Recurrent AF	1.1, 1.2, 1.4	0.76	2	None	4	None
39	M	74	Gastrointestinal cancer	Oxaliplatin	No	Grade 1* Grade 2**	Yes	UNK	MC/B	+++	Recurrent reactions	1.2, 1.3	1.87	0.33	None	1	None
40	M	83	Gastrointestinal cancer	Oxaliplatin	No	Grade 3* Grade 4	Yes	UNK	MC/B	++	Recurrent reactions	1.1, 1.2, 1.3	1.6	1.33	None	2	1 AU
41	F	42	Gynaecological cancer	Carboplatin	Yes Failure of RDD	Grade 2* Grade 2**	UNK	UNK	MC/B	++	Recurrent AF	1.2, 1.4	1.2	0.67	Important tremor	5	1 AU
42	F	40	Gynaecological cancer	Paclitaxel	No	Grade 3* Grade 4**	Yes	UNK	MR	-	AF shock in step 2	1.1, 1.2	0.72	5.33	None	5	None

Abbreviations: AF: anaphylaxis/anaphylactic; AU: acute urticaria; AI: adrenaline infusion; CR: cytokine release; F: Female; HBP: high blood pressure; ; IL-6: interleukin 6; M: male; MC/B: mast cell/basophil mediated; Mixed reaction: MR; Phe: phenotype; RDD: rapid drug desensitization; ST: skin test; +: intradermal test 1/10 positive; ++: skin prick test 1/1 positive; +++: skin prick test 1/10; - : negative skin test; UNK: unknown.

* Brown's classification.

** CTCAE classification.

***In this column we show patients that started RDD without the AI and describe the BTR during the procedure (recurrent reactions/AF/AF shock)

****Stop due to patients' decision.

Elevated serum values of tryptase during reaction were defined as $\geq (120\%+2)$ of basal serum tryptase.

&. Elevated values of Serum IL6 were arbitrarily defined as an increase of more than 50% compared to baseline levels and above the measurement range of detection.