

Supplementary table 1

Events	Perl (2019) Adverse effect of treatment >= 20% of the patients in either treatment group						Levis (2024) TEAEs in 5% or more of participants		Hosono (2021) Adverse effects in >5% of patients in either treatment group				Wang (2022) Events in >=20% of patients in either treatment group				Dumas (2023) Gilteritinib-related grade >=3 adverse events during treatment		
	(Arm 1) Gilteritinib (N=246)			(Arm 2) Salvage Chemotherapy (N=109)			(Arm 1) Gilteritinib (N=178)	(Arm 2) Placebo (N=177)	(Arm 1) Gilteritinib		(Arm 2) Salvage Chemotherapy		(Arm 1) Gilteritinib + Azacitidine (n=73)		(Arm 2) Azacitidine (n=47)		(Arm 1) Overall study (n=167) (100%)	(Arm 2) Single agent n=140 (100%) No prior mido (n=70)	(Arm 3) Single agent and prior exposure to "3 + 7 + mido" (n=67) (100%)
	Adverse Event of Any Grade	Grade ≥3 Event	Serious Adverse Event	Adverse Event of Any Grade	Grade ≥3 Event	Serious Adverse Event	Grade ≥3 Event	Grade ≥3 Event	Japanese patients (n=33)	All other patients (n=213)	Japanese patients (n=14)	All other patients (n=95)	All grades	Grade >=3	All grades	Grade >=3	Combination (n=27)	Prior mido (n=70)	
Febrile neutropenia	115 (46.7)	113 (45.9)	76 (30.9)	40 (36.7)	40 (36.7)	9 (8.3)		12 (36)	26 (12)	3 (21)	17 (18)	26 (35.6)	26 (35.6)	10 (21.3)	9 (19.1)				
Anemia	116 (47.2)	100 (40.7)	8 (3.3)	38 (34.9)	33 (30.3)	0	17 (9.6)	8 (24)	40 (19)	6 (43)	15 (16)	23 (31.5)	18 (24.7)	16 (34.0)	13 (27.7)	68 (41.0)	56 (40.3)	24 (35.8)	
Pyrexia	105 (42.7)	8 (3.3)	32 (13.0)	32 (29.4)	4 (3.7)	1 (0.9)						35 (47.9)	7 (9.6)	16 (34.0)	0				
ALT increased	103 (41.9)	34 (13.8)	13 (5.3)	10 (9.2)	5 (4.6)	0	11 (6.2)	6 (18)	13 (6)	0	2 (2)								
Diarrhea	81 (32.9)	9 (3.7)	10 (4.1)	32 (29.4)	3 (2.8)	0													
AST increased	99 (40.2)	36 (14.6)	10 (4.1)	13 (11.9)	2 (1.8)	0	11 (6.2)	6 (18)	14 (7)	0	1 (1)	18 (24.7)	4 (5.5)	3 (6.4)	0				
Hypokalemia	71 (28.9)	32 (13.0)	0	34 (31.2)	12 (11.0)	1 (0.9)						16 (21.9)	6 (8.2)	10 (21.3)	4 (8.5)				
Constipation	76 (30.9)	2 (0.8)	0	16 (14.7)	0	0						25 (34.2)	0	10 (21.3)	0				
Fatigue	70 (28.5)	6 (2.4)	4 (1.6)	14 (12.8)	2 (1.8)	1 (0.9)													
Platelet count decreased	56 (22.8)	54 (22.0)	5 (2.0)	28 (25.7)	27 (24.8)	0	38 (21.3)	20 (11.3)	9 (27)	21 (10)	4 (29)	14 (19.2)	13 (17.8)	9 (19.1)	9 (19.1)				
Cough	72 (29.3)	1 (0.4)	2 (0.8)	11 (10.1)	0	0													
Thrombocytopenia	63 (25.6)	56 (22.8)	4 (1.6)	18 (16.5)	18 (16.5)	1 (0.9)		2 (6)	28 (13)	2 (14)	9 (10)	22 (30.1)	20 (27.4)	11 (23.4)	9 (19.1)	88 (53.3)	71 (51.4)	37 (56.1)	
Headache	64 (26.0)	3 (1.2)	5 (2.0)	16 (14.7)	0	0													
Peripheral edema	59 (24.0)	1 (0.4)	0	13 (11.9)	0	0						16 (21.9)	0	5 (10.6)	0				
Vomiting	53 (21.5)	1 (0.4)	1 (0.4)	15 (13.8)	0	0						18 (24.7)	2 (2.7)	8 (17.0)	0				
Dyspnea	58 (23.6)	10 (4.1)	10 (4.1)	7 (6.4)	3 (2.8)	2 (1.8)													
ALP increased	56 (22.8)	7 (2.8)	1 (0.4)	2 (1.8)	0	0													
Decreased WBC count							18 (10.1)	3 (1.7)	6 (18)	20 (9)	4 (29)	10 (11)							
Decreased neutrophil count							64 (36)	23 (13)	6 (18)	18 (9)	2 (14)	7 (7)	14 (19.2)	14 (19.2)	4 (8.5)	4 (8.5)			
Neutropenia									4 (12)	17 (8)	1 (7)	7 (7)	18 (24.7)	16 (21.9)	13 (27.7)	10 (21.3)	87 (52.4)	68 (48.9)	34 (51.5)
Increased blood CPK							14 (7.9)	1 (0.6)	2 (6)	3 (1)	0	0							
Drug eruption									2 (6)	0	1 (7)	0							
Pneumonia									2 (6)	5 (2)	1 (7)	3 (3)	19 (26.0)	15 (20.5)	8 (17.0)	8 (17.0)			
Decreased appetite									0	0	2 (14)	0	15 (20.5)	3 (4.1)	7 (14.9)	1 (2.1)			
Nausea													24 (32.9)	1 (1.4)	10 (21.3)	1 (2.1)			
Asthenia													17 (23.3)	5 (6.8)	7 (14.9)	0			
Edema peripheral													16 (21.9)	0	5 (10.6)	0			
Decreased appetite													15 (20.5)	3 (4.1)	7 (14.9)	1 (2.1)			
Hyponatremia													14 (19.2)	9 (12.3)	3 (6.4)	1 (2.1)			
Sepsis													4 (5.5)	4 (5.5)	5 (10.6)	5 (10.6)			
Tumor lysis syndrome								0	0	2 (14)	0					1 (0.6)	1 (0.7)	1 (1.5)	
Hemorrhage																10 (6.0)	7 (5.0)	5 (7.5)	
Hepatic toxicity																7 (4.2)	5 (3.6)	3 (4.5)	
Differentiation syndrome																10 (6.0)	6 (4.3)	4 (6.0)	
Hypertension							11 (6.2)	6 (3.4)											

Number of patients (percent)