

Rapid and durable recovery of immune effector cells in myelofibrosis patients treated with momelotinib

Authors

Jasmine Makker,^{1,2} Kyaw Htin Thaw,¹ Amna Sheikh,¹ Llywelyn Cadman-Davies,¹ Andrea Duminuco,¹ Elena Torre,¹ Margherita Panetta,¹ Conor Stanley,¹ Hugues de Lavallade,¹ Natalia Curto-Garcia,¹ Priya Sriskandarajah,¹ Jennifer O' Sullivan,¹ Deepti H. Radia,¹ Claire Woodley,¹ Benissa Narciso,¹ Susan Asirvatham,¹ Bethan Psaila,³ Shahram Kordasti,^{1,4} Claire Harrison^{1,4} and Patrick Harrington^{1,4}

¹Department of Clinical Haematology, Guy's & St Thomas' NHS Foundation Trust, London; ²GKT School of Medical Education, King's College London, London; ³Weatherall Institute of Molecular

Medicine, University of Oxford, Oxford and ⁴School of Cancer & Pharmaceutical Sciences, King's College London, London, UK

Correspondence:

P. HARRINGTON - patrick.harrington3@nhs.net
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Supplementary Table 1. Cohort demographics

Variable	Frequency	Median (IQR)
Age		70.5 years (66.3-75.8)
Gender: female, male	19, 27	
Diagnosis		
<i>Primary MF</i>	18	
<i>PET-MF</i>	20	
<i>PPV-MF</i>	7	
<i>MPNu-MF</i>	1	
DIPSS+ score		
<i>High</i>	16	
<i>IR2</i>	24	
<i>IR1</i>	6	
JAKi exposure	39	
<i>Ruxolitinib</i>	39	
<i>Fedratinib</i>	1	
Ruxolitinib dosage		
<i>High (≥25 mg daily)</i>	17	
<i>Low (<25 mg daily)</i>	20	
<i>Unknown</i>	1	
Time on ruxolitinib		1.5 years (0.5-3)
Reason for ruxolitinib discontinuation		
<i>Anemia</i>	35	
<i>Thrombocytopenia</i>	3	
<i>Other</i>	2	
Direct ruxolitinib-to-momelotinib transition interval	38	
<i>≥4 weeks</i>	8	
<i><4 weeks</i>	30	
Momelotinib dose		
<i>200mg OD</i>	35	
<i>150mg OD → 200mg</i>	1	
<i>200mg OD → 100mg</i>	2	
<i>200mg alt days</i>	1	
<i>150mg OD</i>	1	
<i>100mg OD</i>	6	
Reason for momelotinib dose reduction		
<i>Poor renal function</i>	5	
<i>Thrombocytopenia</i>	2	
<i>Frailty</i>	1	
<i>Fatigue</i>	1	
<i>Unknown</i>	1	
Chronic kidney disease stage		
<i>4</i>	2	
<i>3b</i>	5	
<i>3a</i>	12	

Baseline driver mutations		
<i>JAK2</i>	28	
<i>CALR</i>	10	
<i>MPL</i>	7	

Supplementary Table 2. Medians and interquartile range of immune cell subset levels at each time point stratified by analyzed subgroups. All cell counts are expressed in cells/ μ L. Lab reference ranges and sample sizes (n) at each time point are included.

Immune subset (Reference ranges)	Baseline	6 weeks	12 weeks	24 weeks	48 weeks
RUX-naïve vs. RUX exposed					
Total lymphocytes	732.5 (484.8-1722); n=4 vs. 1124 (801-1544); n=29	903 (707.5-1181), n=3 vs. 1576 (1298.5-2835); n=31	1398 (1155.8-2729.8), n=4 vs. 1738 (1295-2877); n=21	1385.5 (1240.3-2129); n=4 vs. 1450 (915.5-2156); n=23	1581 (982-2180), n=2 vs. 1797 (1283.5-2288.5); n=19
CD3+ cells (700-2100)	523 (372.25-1276.25); n=4 vs. 727 (498-923); n=29	620 (509-778); n=3 vs. 1050 (748-1655); n=31	1002.5 (846-2016); n=4 vs. 1112 (736-1696); n=21	897 (792.8-1484.8); n=4 vs. 876 (573.5-1366.5); n=23	1024 (714-1334), n=2 vs. 1069 (654-1310.3); n=18
CD4+ cells (300-1400)	375.5 (220.3-784.8); n=4 vs. 476 (361-537); n=29	299 (255.5-515.5); n=3 vs. 571 (436.5-926.5); n=31	709.5 (486.3-1171.8); n=4 vs. 714 (413-1093); n=21	602.5 (467.8-922.8); n=4 vs. 463 (300.5-1025.5); n=23	723.5 (403-1044), n=2 vs. 672 (413.5-898.5); n=19
CD8+ cells (200-900)	139.5 (137-486.8); n=4 vs. 232 (139-393); n=29	189 (169-256.6); n=3 vs. 368 (212.5-798.5); n=31	360.5 (316.3-921); n=4 vs. 375 (265-621); n=21	267 (212-662); n=4 vs. 334 (181-446.5); n=23	315 (295-335), n=2 vs. 332 (202.5-494); n=19
NK cells (90-600)	145.5 (70.8-350.3); n=4 vs. 92 (61-173); n=29	141 (99-233); n=3 vs. 207 (102.5-300); n=31	208.5 (133.3-460.3); n=4 vs. 202 (121-332); n=21	443 (266.5-567); n=4 vs. 152 (97.5-275); n=23	383 (131-635), n=2 vs. 270 (132-386); n=19
B cells (100-500)	62 (55-72); n=3 vs. 184 (95-329); n=29	82 (66-122); n=3 vs. 324 (178-507); n=31	158.5 (139-172.5); n=4 vs. 257 (177-432); n=21	120.5 (79.5-151.8); n=4 vs. 248 (141-297); n=23	108.5 (70-147), n=2 vs. 294.5 (167.3-424.3); n=18
Remote vs. recent RUX exposure					
Total lymphocytes	1183 (835-1668); n=5 vs. 1124 (848-1501); n=23	1397 (1009.25-2526.5); n=6 vs. 1753 (1326.8-2462.3); n=24	2877 (1393-3528); n=5 vs. 1680.5 (1190.8-2358.8); n=16	1393 (1362-1848.5); n=3 vs. 1621 (915.5-2156); n=19	1727 (1600.5-1853.5); n=2 vs. 1857 (1288.3-2376.3); n=16

CD3+ cells (700-2100)	687 (572-1042); n=5 vs. 751 (482.5-888.5); n=23	824 (652.5-2008); n=6 vs. 1093 (776.8-1593); n=24	1656 (876-3098); n=5 vs. 1111 (722-1598.5); n=16	876 (820.5-1138.5); n=3 vs. 999 (573.5-1387.5); n=19	977 (950.5-1003.5); n=2 vs. 1088 (777.5-1416.5); n=15
CD4+ cells (300-1400)	503 (294-537); n=5 vs. 476 (370-584); n=23	523 (343-1262.5); n=6 vs. 577 (439.3-919.3); n=24	1242 (456-1404); n=5 vs. 699.5 (399.3-904.3); n=16	456 (438.5-762); n=3 vs. 617 (300.5-1025.5); n=19	634.5 (566.8-702.3); n=2 vs. 732 (468-966.8); n=16
CD8+ cells (200-900)	244 (140-593); n=5 vs. 232 (146-384); n=23	324 (209.3-721.5); n=6 vs. 405 (241.5-777.75); n=24	375 (368-915); n=5 vs. 360.5 (229.5-594.75); n=16	334 (309-354.5); n=3 vs. 353 (181-474); n=19	281 (242.5-319.5); n=2 vs. 354.5 (208.5-556.3); n=16
NK cells (90-600)	160 (114-206); n=5 vs. 87 (55-138.5); n=23	219.5 (157.5-244.8); n=6 vs. 174.5 (104.3-314.5); n=24	266 (188-293); n=5 vs. 197 (119.3-349.8); n=16	266 (186-280); n=3 vs. 152 (87-275); n=19	396.5 (394.3-398.8); n=2 vs. 192.5 (109.5-326); n=16
B cells (100-500)	178.5 (92.3-315.3); n=4 vs. 184 (128-331); n=23	311 (175-511.5); n=6 vs. 312 (203.5-502); n=24	274 (180-534); n=5 vs. 243 (160.8-426.8); n=16	493 (336.5-570); n=3 vs. 242 (125.5-289); n=19	388.5 (281.3-495.8); n=2 vs. 277 (157.5-419.5); n=15

Supplementary Figure 1. Percentage change in spleen volume from baseline over time. Median, IQR, and number of observations are shown.

