Supplemental file 10. Incidence rate ratio of second cancers in acute promyelocytic leukaemia compared to cancer incidence in the general population.

	No.	No. with 2° cancer	No. of cancers in population[A]	Population[A]	IR of cancer (95% C.I)[B]	P-value[C]	Cancer, APL > population	IRR (APL vs population) (95% C.I.)
Total	678	21	665,894	181,374,978	254 (253, 255)	< 0.001	Yes	14.3 (9.3, 22.0)
Age (years)								
<18	60	0	4,990	58,419,166	14.6 (14.3, 14.9)	0.50	No	undefined[D]
18–39	217	5	41,083	64,307,835	56.6 (56.1, 57.2)	< 0.001	Yes	39.8 (16.5, 95.5)
40–59	262	12	198,136	42,708,670	357 (355, 358)	< 0.001	Yes	15.5 (8.8, 27.3)
60–79	122	4	314,000	19,962,291	1,146 (1142, 1,151)	0.02	Yes	3.43 (1.29, 9.13)
≥80	17	0	107,685	2,999,997	1,961 (1,946, 1,977)	0.50	No	undefined[D]
Gender								
Male	330	6	355,849	91,849,843	282 (281, 283)	< 0.001	Yes	6.66 (2.99, 14.82)
Female	348	15	310,045	96,548,117	234 (233, 235)	< 0.001	Yes	19.4 (11.7, 32.2)
Period								
1991–1999	146	8	167,371	55,627,198	274 (273, 275)	< 0.001	Yes	21.69 (10.84, 43.36)
2000–2009	257	12	229,847	68,095,442	248 (247, 249)	< 0.001	Yes	21.04 (11.95, 37.04)
2010–2018[E]	275	1	268,676	57,652,338	250 (249, 252)	0.50	No	1.94 (0.27, 13.76)
Exposure to oral-ATO								
No	369	8	665,894	181,374,978	254 (253, 255)	< 0.001	Yes	8.5 (4.3, 17.1)
Yes	309	13	665894	181,374,978	254 (253, 257)	< 0.001	Yes	18.3 (10.6, 31.5)
Time of exposure to oral-ATO								
Never	369	8	665894	181,374,978	253.9 (253.1, 254.6)	< 0.001	Yes	8.5 (4.3, 17.1)
First-line	212	7	665894	181,374,978	253.9 (253.1, 254.6)	< 0.001	Yes	14.6 (7.00, 30.7)
Second-line only	78	5	665894	181,374,978	253.9 (253.1, 254.6)	< 0.001	Yes	26.2 (10.9, 62.9)

APL: acute promyelocytic leukaemia; ATO: arsenic trioxide; No.: number; 2°: second; C.I.: confidence intervals; IR: incidence ratio; IRR: incidence rate ratio; A: The World WHO (2000-2025) standard population as the reference standard; B: IR was defined as number of events divided by the person-time at risk; C: Two sample Z test of proportions; D: values labelled as undefined, owing to the fact that IRR cannot be defined in different subgroups of age due to the small sample size; E: The last year where a second primary cancer occurred was in 2018. Comparison against the standard population was therefore until 2018. 2019-2021 was not included for second cancer comparison as the follow-up time for patients was too short to conclude if the incidence of second cancers was increased or decreased