



P1.298: Optimal Timing of Anti-PD-(L)1 Initiation During Anti-Tuberculosis Treatment in Cancer Patients with Active Tuberculosis

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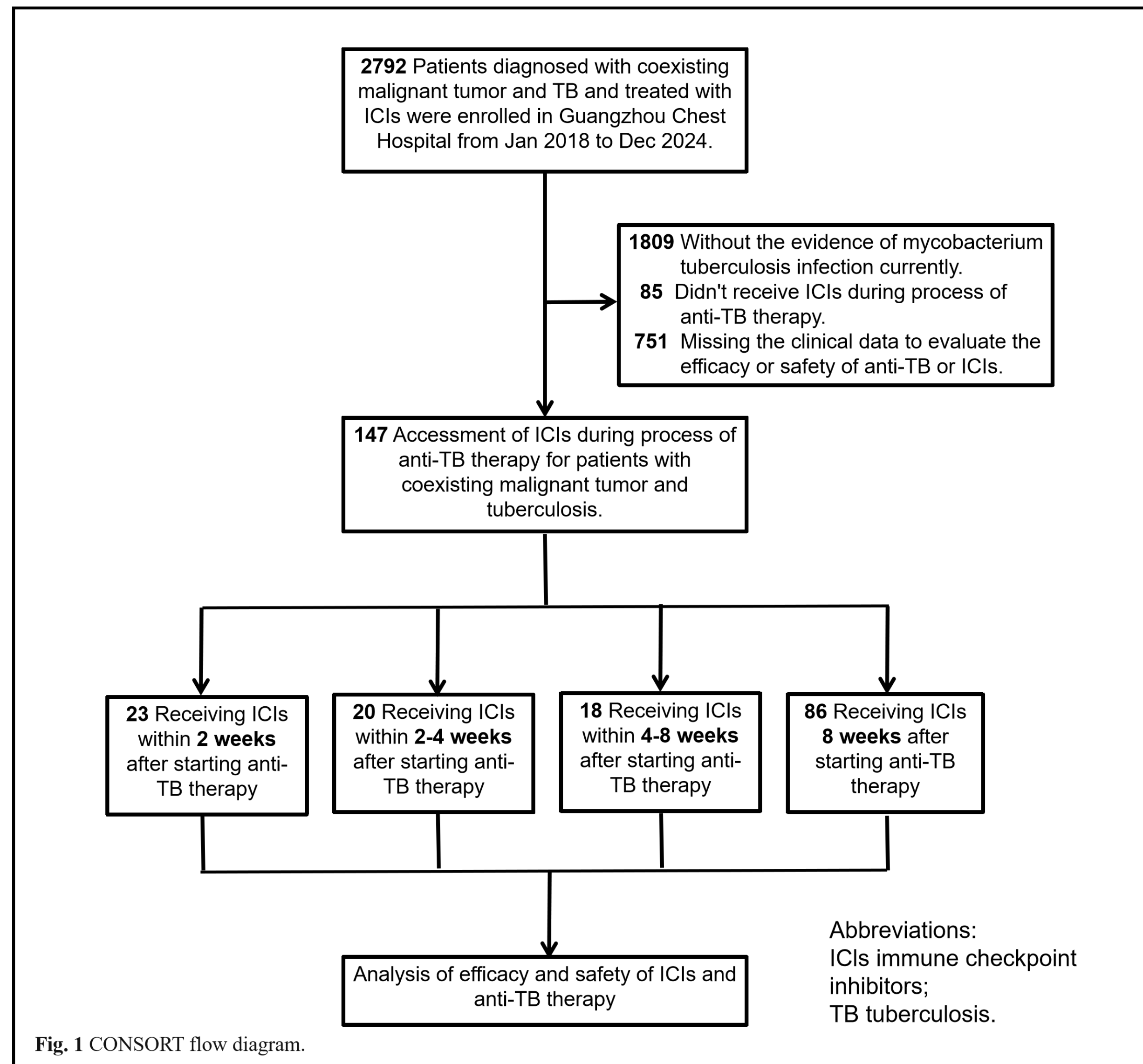
INTRODUCTION

Serial studies have shown that cancer and receiving immune checkpoint inhibitors (ICIs) therapy may be risk factors for tuberculosis activation.

However, the optimal timing of receiving ICIs for patients with coexisting malignancy and TB, especially for those with active TB treated with concurrent anti- pulmonary tuberculosis, remains unknown. This study aimed to evaluate the safety and efficacy of different time interval from anti-pulmonary tuberculosis therapy to ICIs initiation.

METHODS

- This retrospective study included patients with active pulmonary tuberculosis and malignancy who received ICIs during anti-pulmonary tuberculosis therapy.
- Patients were divided into four groups based on the interval from the start of anti-pulmonary tuberculosis start to anti-PD-(L)1 therapy: ≤ 2 weeks, 2-4 weeks, 4-8 weeks, and >8 weeks.
- Primary outcomes were pulmonary tuberculosis reactivation rates and adverse events (AEs). (Fig. 1)



DISCUSSION AND CONCLUSION

- This retrospective study enrolled 147 cancer patients with active tuberculosis to investigate the optimal timing of anti-PD-(L)1 treatment during the process of anti-TB therapy.
- Overall TB reactivation and severe adverse events were rare, with no treatment-related deaths.
- Different intervals showed distinct safety profiles: early ICI initiation was associated with higher hepatic toxicity, while a delay of over 8 weeks reduced grade ≥ 3 adverse events but increased hematotoxicity.
- Individualized timing and regular anti-TB administration are essential for safe clinical management.

RESULTS

A total of 147 eligible patients were analyzed. Baseline characteristics were comparable across groups. Pulmonary tuberculosis relapse occurred in 2/147 (1.4%), both in >8 weeks group due to irregular anti-pulmonary tuberculosis treatment. No treatment-related deaths occurred. 2/147 (1.4%) patients discontinued ICIs because of grade ≥ 3 immunotherapy-related dermatitis. Grade ≥ 3 AEs were numerically lower in >8 weeks (7%) than in other groups. Hepatic toxicity was most common in ≤ 2 weeks group (83.3%), while hematotoxicity peaked in the >8 weeks group (47.5%, 83.3% grade ≥ 3). Pneumonia occurred at low rates across all groups. (Table 1)

Table 2. Treatment-related adverse events during anti-PD(L)-1 and anti-tuberculosis treatment (N=147)

	≤ 2 Weeks (N=23)		2-4 Weeks (N=20)		4-8 Weeks (N=18)		>8 Weeks (N=86)	
	All grades (n=12)	$\geq$ Grades 3 (n=5)	All grades (n=12)	$\geq$ Grades 3 (n=6)	All grades (n=8)	$\geq$ Grades 3 (n=4)	All grades (n=40)	$\geq$ Grades 3 (n=6)
Any event	0	0	0	0	0	0	0	0
Thyroid dysfunction	0	0	0	0	0	0	0	0
Pneumonia	0	0	2(17%)	1(17%)	1(13%)	0	7(18%)	1(17%)
Hematotoxicity	1(8%)	1(20%)	2(17%)	1(17%)	3(38%)	2(50%)	19(48%)	5(83%)
Hepatic toxicity	10(83%)	4(80%)	5(42%)	4(67%)	4(50%)	2(50%)	6(15%)	0
Gastrointestinal toxicity	0	0	0	0	0	0	2(5%)	0
Dermatitis	2(17%)	1(20%)	5(42%)	0	2(25%)	0	8(20%)	2(33%)
Endocrine toxicity	0	0	0	0	0	0	0	0
Any event leading to discontinuation of ICI	1(8%)	1(20%)	0	0	0	0	1(3%)	1(17%)
Any event leading to death	0	0	0	0	0	0	0	0

Abbreviation: TRAEs Treatment-related adverse events, ICI immune checkpoint inhibitors

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