

Thymosin α1 — Alternative Posology: Every-3-Days Rolling Schedule

The standard twice-weekly (Tue/Fri) schedule creates uneven inter-dose intervals (3 days then 4 days). An every-3-days rolling schedule using **3 × 1.6 mg compounded vials** eliminates this asymmetry, fits naturally within the bacteriostatic-water 7-day beyond-use date, and provides tighter coverage of the 72-hour transcriptional effect window.

Schedule Rotation (9-Dose Repeating Cycle)

Dose	Day	Day of week	Vial	Days since opened	Within 7d BUD?
1	Day 1	Monday	Vial 1	0	✓
2	Day 4	Thursday	Vial 1	3	✓
3	Day 7	Sunday	Vial 1	6	✓
4	Day 10	Wednesday	Vial 2	0	✓
5	Day 13	Saturday	Vial 2	3	✓
6	Day 16	Tuesday	Vial 2	6	✓
7	Day 19	Friday	Vial 3	0	✓
8	Day 22	Monday	Vial 3	3	✓
9	Day 25	Thursday	Vial 3	6	✓
...	→ cycle resumes Day 28 = Day 1				

Cycle returns to same weekday every 9 doses (27 days). Set a repeating 3-day alarm.

Comparison: Standard Tue/Fri vs. Every-3-Days

Parameter	Tue / Fri (standard)	Every-3-Days (alternative)
Inter-dose spacing	3d then 4d (uneven)	3d uniform
Doses per week	2.00	2.33
Weekly Tα1 dose	3.2 mg	3.73 mg (+17%)
72h transcriptional window coverage	4-day gap Fri→Tue	Fully covered
Receptor inter-dose rest	3 or 4 days	Consistently 3 days
Vial BUD margin	N/A (single-dose Zadaxin)	6 days — 1d margin ✓
Calendar simplicity	Fixed days (simple)	Rolling (tracker needed)
RCT evidence base	Full (hepatitis B/C, 52 wk)	PK extrapolation only

Compounded Vial Preparation

Vial specification	4.8 mg Thymosin α1 lyophilized (3 × standard dose per vial)
Reconstitution vehicle	3.0 mL bacteriostatic water for injection (0.9% benzyl alcohol)
Resulting concentration	1.6 mg/mL — withdraw exactly 1.0 mL per dose (use 1 mL syringe)
Storage after reconstitution	2–8°C main refrigerator body (not door; not back wall); upright, capped, amber vial
Beyond-use date (BUD)	7 days from reconstitution (FDA PCAC-consistent with bacteriostatic vehicle)

Max days open per this schedule	6 days — preserves 24h safety margin before BUD every cycle
Why NOT 1.8°C storage?	Arrhenius analysis: only ~11% slower degradation vs 4°C. Refrigerators cycle ±1–2°C; back-wall cold spots can reach –1°C. Freezing risk outweighs the marginal stability gain. Stay at 4°C; stay within 7 days.
Do NOT	Freeze reconstituted solution · Use if cloudy/particulate · Store in door

■ Dosing Notes

The 17% higher weekly dose (3.73 mg vs 3.2 mg) is within the range used in oncology adjunct settings. No dose-ceiling toxicity observed at 1.6 mg ×2/week over 52 weeks; marginal increase not expected to alter the safety profile.

This schedule has NO randomised trial support at this frequency — it is a PK extrapolation from the approved twice-weekly regimen. The standard Tue/Fri schedule remains the evidence-based default. This alternative suits practitioners prioritising uniform receptor spacing and vial economy.