

CRITICAL CARE TRIALS 2026

The deimplementation year

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2026: the deimplementation year

Most of this year's big trials said “no better than simpler / standard care.” The gains were about precision, not addition.

NO BETTER THAN STANDARD

- Bicarbonate (×3)
- Conservative O₂ post-arrest
- High-flow for mortality
- Fluid choice & strategy
- Albumin in shock
- Closed-loop ventilation
- Physical restraints
- Remote monitoring
- Liberal post-ICU transfusion

SIGNALS OF HARM — STOP

- Mucoactives (MARCH)
- High-dose vitamin C in burns (VICTORY)
- Oseltamivir in critically ill influenza (REMAP-CAP)

THE WINS WERE PRECISION

- Phenotype-guided resuscitation
- Biomarker-guided immunotherapy
- Steroids in the right CAP patients
- Lower O₂ targets in children
- Structured tele-rehabilitation
- Dropping rituals (gastric residuals)

01 Fluids & resuscitation



ARISS — Albumin didn't improve 90-day survival in septic shock (stopped early, underpowered); don't use it to chase mortality.



ARISE FLUIDS — Restricted fluids + early vasopressors gave no more days alive and out of hospital than liberal fluids; either is fine.



PROMPT BOLUS — Balanced fluids and saline performed alike in paediatric septic shock; fluid type doesn't matter, recognition does.

FISSH Ringer's lactate vs saline in septic shock; Septic shock · n=1103

💡 *The “perfect resuscitation fluid/strategy” keeps coming back null — pick a sensible approach and move on.*

02 Haemodynamics & perfusion



TARTARE-2S — Tissue-perfusion targeting at a lower-than-recommended BP showed no benefit over MAP-guided care; keep your usual MAP target.



ANDROMEDA-SHOCK 2 — Phenotype-based, layered physiologic resuscitation (CRT only as the entry trigger, then macro/microvascular uncoupling, mean stressed volume, ventriculo-arterial coupling): the most promising signal to date for resuscitation phenotyping — not yet practice-ready.

💡 *Physiology over protocol — phenotyping is the direction of travel, but a signal to watch, not a change to make tomorrow.*

03 Acid–base & bicarbonate



BICAR-ICU2 — No 90-day mortality benefit, but bicarbonate cut and delayed dialysis (KRT 35% vs 50%); can defer dialysis in AKI + acidaemia.



SODA-BIC — Bicarbonate didn't reduce major adverse kidney events in vasopressor-dependent acidosis; don't infuse it to fix the pH.



BIHCA — No improvement in ROSC or survival, with more alkalosis and hypernatraemia; drop the reflex amp in arrest.

💡 *Bicarbonate doesn't save lives anywhere we tested it — its only credible role is deferring dialysis.*

04 Cardiac arrest



LOGICAL — Conservative oxygen didn't improve survival with favourable function after arrest; target normoxia, don't chase tight low targets.

BIHCA — see Acid–base: no role for routine bicarbonate in arrest.

💡 *Back to the basics that work — compressions, early adrenaline, reversible causes; the adjuncts disappointed.*

05 Oxygen & respiratory support



SOHO — High-flow nasal oxygen was negative for mortality (lower intubation the only residual signal); use it for comfort, not survival.



OXYKids (Oxy-PICU) — Conservative SpO₂ targets (88–92%) gave a small but significant benefit in ventilated children; lower is safe and modestly better in kids.

💡 *Stop over-oxygenating — aim for normoxia (a touch lower in kids), and don't oversell the device.*

06 Ventilation & airway



ACTIVE — Closed-loop ventilation was safe but added no extra ventilator-free days.



MARCH — Mucoactives (carbocysteine / hypertonic saline) didn't help and signalled harm; stop them.



RSI trial — Ketamine vs etomidate: same mortality, slightly more cardiovascular collapse with ketamine.

💡 *Automate if it saves effort, deprescribe mucoactives, and don't agonise over the induction agent.*

07 Sedation, delirium & restraint



R2D2 — A restrictive, low-use restraint strategy was safe and didn't change delirium or coma duration; use fewer restraints without harm.

SAVE-ICU *result pending* — *volatile vs IV sedation in hypoxaemic respiratory failure; presented at CCR26, not yet indexed. Finding Hospital mortality 42.5% vs 43.6% (RR 0.99; P=0.85); differences in delirium/coma-free days and greater use of hypoxaemia adjuncts with isoflurane.*

💡 *Lighten up on physical restraints — it's safe, even if it isn't a delirium cure.*

08 Sepsis — immunomodulation & infection



ImmunoSep — Personalized (biomarker-guided) immunotherapy improved organ function by day 9, not mortality.

SONIA — Adjunctive low-dose steroids cut mortality in hospitalized (non-ICU) CAP; extends the steroid signal below the severe-ICU tier (design caveats apply).

REMAP-CAP (oseltamivir) — Oseltamivir ineffective and probably harmful in critically ill influenza (not outpatients).

💡 *Phenotype-guided immunomodulation is the direction of travel; meanwhile, question oseltamivir in your sickest flu patients.*

09 Nutrition & metabolic



VICTORY — High-dose IV vitamin C in burns showed no benefit and possible harm (stopped early); don't give it.

GASTRIC-PICU — Skipping routine gastric-residual checks is safe and improves feeding delivery.

💡 *Two “stop doing this” wins — bin high-dose vitamin C in burns and routine gastric residuals in kids.*

10 Rehabilitation & post-ICU recovery



iRehab — Remote rehab helped shorter-ventilation survivors (<1 week), not everyone; target it, don't blanket-offer.



TELE-Rehab — Integrated tele-rehab improved QoL (EQ-5D +0.049, P=0.04), cut mortality (71.8% vs 78.3%, P=0.03), +~4.9 days alive and at home at 90d; the standout positive.



ACCOMPLISH — No remote-monitoring strategy improved days alive at home; older patients fared worse.

ABC post-ICU — Liberal vs restrictive transfusion in anaemic survivors: no recovery benefit (SF-36 PCS 3.0 vs 2.9, P=0.49) despite ~67% more transfusion.

💡 *It's the active rehab content that works (TELE-Rehab), not remote tech alone (ACCOMPLISH) — and more blood doesn't buy recovery (ABC).*

The single message

**Do less of the reflexive stuff.
Aim the active therapies at who actually
benefits.**

2026's wins were precision, not addition.