SPICE IV Sedation Practice in Intensive Care Evaluation

Protocol Summary

Early Sedation with Dexmedetomidine vs. Placebo in Older Ventilated Critically Ill Patients

A Prospective, Multi-Centre, Double-Blind, Randomized, Controlled Trial

The SPICE IV Trial follows on from its predecessor SPICE III. The SPICE III Trial highlighted a difference in the effect of Dexmedetomidine between younger and older adults – showing a lower mortality in the older adult group. Therefore, the SPICE IV Trial will focus on this patient group and build upon the work in SPICE III.

The primary aim is to determine whether early sedation with Dexmedetomidine will reduce mortality at 90 days in mechanically ventilated patients >65 years old, as well as delirium and ventilator free days.

If your site has participated in the SPICE III, or the recent A2B Trial you will have experience of working with the Trial IMP – Dexmedetomidine. The predominant difference with SPICE IV and A2B is that it is placebo controlled, meaning site staff and patients will be blinded to treatment allocation.

Patients will be randomized to receive an IV infusion of Dexmedetomidine or a matching blinded placebo which will be administered until sedation is no longer required, ICU discharge or Day 28. At target RASS of -1 to +1 will be maintained (unless clinically indicated) with the trial IMP – supplementary sedatives may be given only if required, e.g. neuromuscular blockade.

Data, including RASS score, CAM-ICU, will collected until Day 28. Follow ups are conducted at Day 90 and 180.

The Trial is Sponsored by Monash University and endorsed by the ANZICC Trial Group. Cardiff & Vale University Health Board will be acting as the UK Lead Site and coordinating the approvals and site set up process.

Please review the inclusion and exclusion criteria below, alongside the information in this summary and complete the Expression of Interest Form if you would like to receive further information and to be considered as a site.

For further information please contact:

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Or

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Inclusion Criteria

- Age ≥ 65 years
- Intubated and receiving invasive mechanical ventilation in an intensive care unit
- The treating clinicians believe that the patient will remain intubated and ventilated until the day after tomorrow
- The patient requires immediate ongoing sedative medication for comfort, safety and to facilitate the delivery of life support measures

Exclusion Criteria

- Has been intubated (excluding time spent intubated within an operating theatre or transport) for greater than 12 hours, with an additional 6 hours grace period, a total of 18 hours, in an intensive care unit
- Proven or suspected acute primary brain lesion such as traumatic brain injury, intracranial haemorrhage, stroke, or hypoxic brain injury
- Proven or suspected spinal cord injury or other pathology that may result in permanent or prolonged weakness
- Admission with a suspected or proven drug overdose or burns.
- Administration of ongoing neuromuscular blockade
- Mean arterial blood (MAP) pressure that is less than 50 mmHg despite adequate resuscitation and vasopressor therapy at time of randomization
- Heart rate less than 55 beats per minute unless the patient is being treated with a betablocker or a high grade atrio-ventricular block in the absence of a functioning pacemaker
- Known sensitivity to dexmedetomidine
- Acute fulminant hepatic failure
- Receiving full time residential nursing care
- Death is deemed to be imminent or inevitable during this admission and either the attending physician, patient or substitute decision maker is not committed to active treatment
- Patient has an underlying disease that makes survival to 90 days unlikely
- Previously enrolled in the SPICE IV study