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Outcomes after automated oxygen control for preterm infants

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Outcomes after automated oxygen control for preterm infants

1. Algorithm design influences how effective SpO_2 targeting will be.

This thesis

2. The OxyGenie controller is more effective in keeping oxygen saturation of preterm infants within a target range than the CLiO₂ controller.

This thesis

3. Rather than masking clinical deterioration, automated oxygen control can provide an objective indicator of clinical status.

This thesis

4. The currently used definition for bronchopulmonary dysplasia may not be suitable when automated oxygen control is used.

This thesis

5. Automated oxygen control may reduce morbidity associated with respiratory instability, with retinopathy of prematurity in particular.

This thesis

6. When investigating effectivity of oxygen titration focus should lie on phases of respiratory instability and/or when supplemental oxygen is administered.

This thesis

7. Clinicians need to have some understanding of how an automated oxygen controller computes what FiO_2 to set next.

(Arch. Dis. Child.: Fetal Neonatal Ed; 2019;104:F346-F347)

8. There is no ideal oxygen saturation target range.

(Pediatrics; 2016; 138(2):e20161576)

9. Automated oxygen control should become part of routine clinical care.

(Early Hum Dev; 2021 Nov;162:105462)

10. A new strategy for SpO_2 alarms is needed for automated oxygen control.

(BMC Pediatr; 2019 May 6;19(1):142)

11. A computer is not an intelligent device.

12. Everything tedious that can safely be automated, should be automated.