



## Biomarkers and the Prediction of Risk for NEC

### Guidelines for Healthcare Providers

- Brigham and Woman's Hospital Clinical Practice Guidelines for Diagnostic Evaluation of Necrotizing Enterocolitis (NEC)
  - <https://www.brighamandwomens.org/assets/BWH/pediatric-newborn-medicine/pdfs/gastro-nec-cpg.pdf>

### Clinician Resources

- NEC Society NEC Biorepository
  - <https://necsociety.org/nec-biorepository/>
- GutCheckNEC: a clinical tool for predicting NEC risk
  - <https://arizona.app.box.com/s/i16g3gcn91ejj0vc09pt1qv7uxekfey>
- Clinical Care Bundle to prevent NEC
  - <https://www.newbornjournal.org/abstractArticleContentBrowse/JNB/36323/JPJ/fullText>
- Implementation of bowel ultrasound for NEC evaluation
  - <https://fn.bmj.com/content/106/1/96>

### Key Publications

- Wang B, Koch MA. Cytokine therapy in necrotizing enterocolitis: A promising treatment for preterm infants. *Cell Rep Med*. 2021;2(6):100324. doi:10.1016/j.xcrm.2021.100324
  - [https://www.cell.com/cell-reports-medicine/fulltext/S2666-3791\(21\)00167-1](https://www.cell.com/cell-reports-medicine/fulltext/S2666-3791(21)00167-1)
- Mackay S, Frazer LC, Bailey GK, et al. Identification of serum biomarkers for necrotizing enterocolitis using aptamer-based proteomics. *Front Pediatr*. 2023;11:1184940. doi:10.3389/fped.2023.1184940
  - <https://www.frontiersin.org/journals/pediatrics/articles/10.3389/fped.2023.1184940/full>
- Nolan LS, Mihi B, Agrawal P, et al. Indole-3-Carbinol-Dependent Aryl Hydrocarbon Receptor Signaling Attenuates the Inflammatory Response in Experimental Necrotizing Enterocolitis. *Immunohorizons*. 2021;5(4):193-209. doi:10.4049/immunohorizons.2100018
  - <https://journals.aai.org/immunohorizons/article/5/4/193/233988/Indole-3-Carbinol-Dependent-Aryl-Hydrocarbon>

### Parent Resources

- NEC Society Family Resource Boxes for new diagnosis or bereaved parents
  - <https://necsociety.org/family-resource-boxes/>
- AAP Information for Parents
  - <https://www.healthychildren.org/English/ages-stages/baby/preemie/Pages/what-is-necrotizing-enterocolitis-nec.aspx>



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