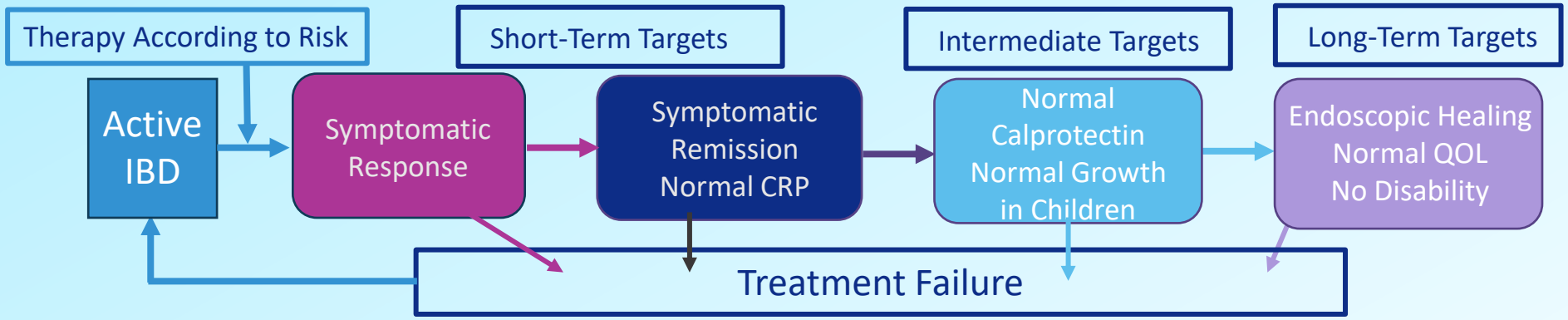
STRIDE II and Establishing Treatment Goals

- Selecting Therapeutic Targets in Inflammatory Bowel Disease (STRIDE-II)
  - Initiative of the International Organization for the Study of IBD; 2021 update
  - Provides guidance on selecting therapies to achieve short- and long-term targets
    - Treatment tailored to individual's response to therapy
    - Studies have demonstrated clinical benefits of treat-to-target strategies
    - Regular assessment is potentially time-consuming and expensive



- Gaps in knowledge
  - QOL assessments that can easily be used in clinical practice
  - Validated endoscopic healing thresholds

CRP, C-reactive protein; IBD, inflammatory bowel disease; QOL, quality of life.

Turner D, et al. *Gastroenterology*. 2021;160(5):1570-83.

Monitoring IBD with Biomarkers

- Treating to target goals requires regular monitoring
- AGA recently released guidelines for using a combination of symptoms and biomarkers to potentially reduce endoscopy frequency in UC
  - Biomarkers: fecal calprotectin, fecal lactoferrin, or serum C-reactive protein
  - Thresholds for elevated levels
    - >150 µg/g fecal calprotectin, 7.5 µg/g fecal lactoferrin, >5 mg/L CRP

Symptoms Status		Biomarker Status		Recommendation
Remission	+	Elevated	→	Endoscopic assessment; repeat biomarker measurements in 3-6 months is a reasonable alternative
Mild	+	Normal or Elevated	→	Endoscopic assessment rather than empiric treatment adjustment
Moderate-to-Severe	+	Elevated	→	Empiric treatment adjustment without endoscopy

AGA, American Gastroenterological Association; CRP, C-reactive protein; UC, ulcerative colitis.
Singh S, et al. *Gastroenterology*. 2023;164(3):344-72.

Future Directions for Monitoring with Biomarkers

- C-reactive protein and fecal calprotectin predict disease activity and are currently used in clinical practice[1]
  - Limited accuracy; intermediate values are not predictive[2]
- Current research underway to identify additional biomarkers that monitor disease progression and possibly distinguish between UC and CD[1,3]
  - Proteins
  - Lipids
  - Genetic and epigenetic expression
- Composites of multiple biomarkers are likely to have greater accuracy than any single measure[1]

CD, Crohn's disease.

1. Alghoul Z, et al. *Biomedicines.* 2022;10(7):1492; 2. Turner D, et al. *Gastroenterology*. 2021;160(5):1570-83; 3. Cecerska-Heryć E, et al. *Proteomics Clin Appl*. 2023;17(1):e2200003.

Ultrasound for Monitoring IBD

- Endoscopy is the gold standard for evaluating intestinal inflammation and damage in the diagnosis and monitoring of IBD
- Recent studies have evaluated effectiveness of ultrasound (US) for monitoring progression and response to therapy
  - US measurements of bowel wall thickness correlated with endoscopic remission and response following tofacitinib treatment in patients with UC[1]
  - US assessments correlated with those of colonoscopy and MRE, with high specificity and sensitivity, for localization, enhancement, ulcer activity, and complications in patients with CD[2]
- Advantages of ultrasound: less invasive, less expensive

MRE, magnetic resonance enterography.

1. de Voogd F, et al. *Gastroenterology*. 2022;163(6):1569-81; 2. Allocca M, et al. *J Crohns Colitis*. 2018;12(11):1280-7.