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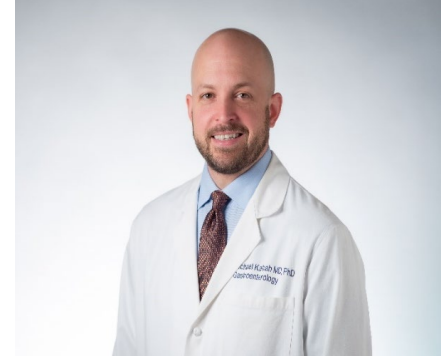
UCSF IBD TOWN HALL

Nutrition

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Housekeeping



Your microphone will be muted



Ask a question by:

- Typing your question in the Q&A box
- Upvote similar questions you like
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Schedule of Events

- Introduction, News, Nutrition Data
 - Uma Mahadevan MD
- My Story
 - Seamus Mullen
- IBD and Nutrition
 - Neha Shah MPH, RD, CNSC, CHES
- IBD Trials
 - Karan Bhatia CRC
- Question and Answer Session

Vaccines

- IBD pts have good response to all vaccines
 - Older patients, steroids, combination with azathioprine/MTX ↓
- Mayo Clinic:
 - Florida, risk of breakthrough was 60% lower for Moderna vs. Pfizer
 - Minnesota, Moderna vaccine 76% effective at preventing infection vs. 42% Pfizer vaccine
 - Pre-print, Pfizer came out first, not typed for Delta, more mRNA in moderna
- Booster
 - J+J can get mRNA booster in SF
 - FDA Booster for immunosuppressed?



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IBD CHAT

Uma Mahadevan MD

IBD CHAT

- Why?
 - Develop a virtual care chat for remote Patient Reported Outcomes
 - Reminder to obtain labs at appropriate time intervals/well visit?
 - Reassurance if doing well without any symptom flares
 - Identify symptom flares for clinical escalation to provider
- What?
 - You will receive an email/text asking you to sign up
 - You will get prompts to do your questionnaires
 - If you have red flag alarm symptoms we will be alerted
 - If you are having severe symptoms, call your doctor!

Demonstration

IBD Nutrition: Data



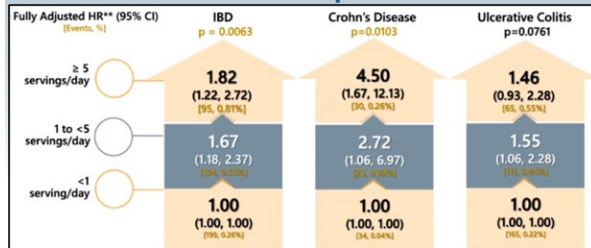
Processed and Ultra-Processed Foods Associated with Increased Risk of Inflammatory Bowel Disease

- **Processed food:** Food altered during preparation including adding preservatives
- **Ultra-processed food:** Made from substrates extracted from food with additives such as carboxymethyl cellulose, polysorbate 80, carrageenan.

1

- Observational cohort study (2003-2016)
- 21 countries, N=116,037, age: 35 – 70 years
- Habitual food intake assessed using country-specific validated food frequency questionnaire

Association between total processed food intake and development of IBD



Conclusion: Higher processed food consumption associated with development of IBD

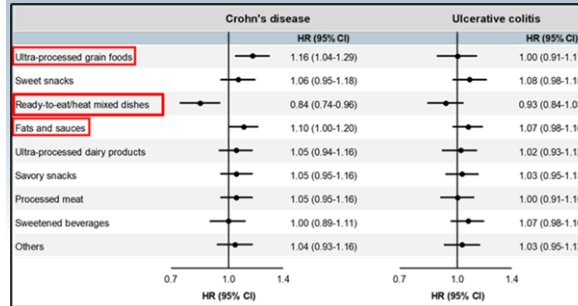
- Soft drinks, sweets, salty snacks, process meats

UPF, Ultra=Processed Food

2

- Nationwide prospective cohorts from Nurses Health Study, Nurses Health Study II & Health Professionals Follow up Study
- 5,471,215 person-years of follow up

Table 1: UPF and Risk of CD & UC



Conclusion: Higher consumption of UPF grains, fats & sauces and emulsifiers/thickeners associated with increased risk of CD

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- **Methods:**
 - Case control, observational study
 - 195 CD patients
 - Early life processed food intake and usual food additive intake assessed
- **Results:**
 - CD patients are more likely to have processed meat than their household ($P=0.03$), consumed processed fruit than their 1st degree relatives ($P=0.022$) and more likely to have consumed fast food than healthy controls ($P<0.001$)

Conclusion: CD patients were more likely to have consumed UPF in early life indicating a likely trigger for disease initiation



Obesity is Associated with Increased Risk of Crohn's Disease

■ Methods:

- A pooled analysis of 5 large prospective cohorts comprising of 601,009 participants from 9 countries (Nurses Health Study (NHS) and Nurses Health Study II (NHS II), European Prospective Investigation into cancer and nutrition (EPIC), Cohort of Swedish Men (COSM) and Swedish Mammography Cohort (SMC))
- Included validated measurements for body mass index (BMI), waist-hip ratio (WHR) and other dietary and life-style factors at baseline

■ Results:

- Over 10,110,018 person years of follow-up, 563 incident cases of CD and 1043 incident cases of UC
- Did not observe any associations between measures of obesity and risk of UC

Table 1: Risk of Crohn's disease according to BMI in Adults at Baseline	BMI > 30	HR (95% CI) per 5kg/m² increase in BMI
Pooled age and sex adjusted HR (95% CI)	1.27 (0.97 - 1.68)	1.10 (1.00 - 1.22)
Pooled multivariable* HR (95% CI)	1.34 (1.05 - 1.71)	1.16 (1.05 - 1.22)

Table 2: Risk of Crohn's disease later in life according to early adulthood BMI (age 18-20)	BMI > 30	HR (95% CI) per 5kg/m² increase in BMI
Pooled age and sex adjusted HR (95% CI)	1.52 (1.15 - 1.99)	1.22 (1.05 - 1.39)
Pooled multivariable* HR (95% CI)	1.48 (1.12 - 1.95)	1.22 (1.05 - 1.40)

*Adjusted for age at baseline (continuous), sex, smoking status, physical activity, energy intake, dietary fiber.

■ Conclusion:

- Obesity as measured by BMI was associated with an increased risk of CD but not UC

Visceral Adipose Tissue (VAT) and Visceral Fat Index (VFI) is Associated with Treatment Response and Lower Rates of Remission in IBD

Methods

- Prospective CONSTELLATION study, patients with IBD were started on IFX, VDZ, or UST and assessed for the association between baseline VAT%, N=126¹
 - **Primary outcome:** SFDR at week 14 defined as HBI <5 in CD and PMS<2 in UC and a normal CRP/FC while off corticosteroids
- Retrospective study of IBD patients starting anti-TNF comparing CT measurements obtained prior to therapy: VAT and VFI (VAT/subcutaneous adipose tissue) and comparing outcomes of anti-TNF response (Figure 1)² and risk of surgery,³ N=176, N=181, respectively
 - **Primary outcome:** CFR at 6 and 12 months

Conclusion

- Patients with a higher percentage of VAT have lower rates of remission with IFX, UST, or VDZ (Figure 2)
- Patients with a higher VAT may require higher doses of anti-TNF initially
- IBD patients starting anti-TNF agents with high VFI are significantly more likely to undergo surgery in the short-term
- Imaging defining visceral adiposity may be more accurate than BMI at assessing biologic response

IFX, infliximab; VDZ, vedolizumab; UST, ustekinumab; VAT, Visceral Adipose Tissue; CFR, SFDR, Corticosteroid-free deep remission; HBI, Harvey-Bradshaw Index; PMS, Partial Mayo Score; FC, Fecal Calprotectin; VFI, Visceral Fat Index; CFR, Corticosteroid-Free Remission

Results

Figure 1: Anti-TNF Response at 12 Months by VAT Volume (cm³)

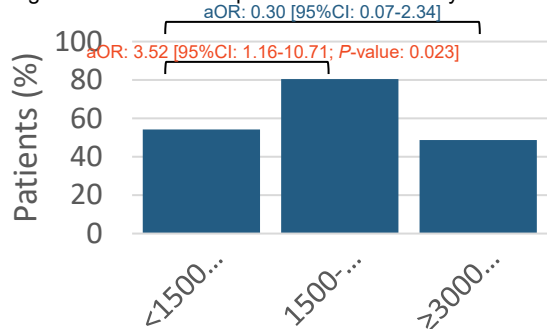
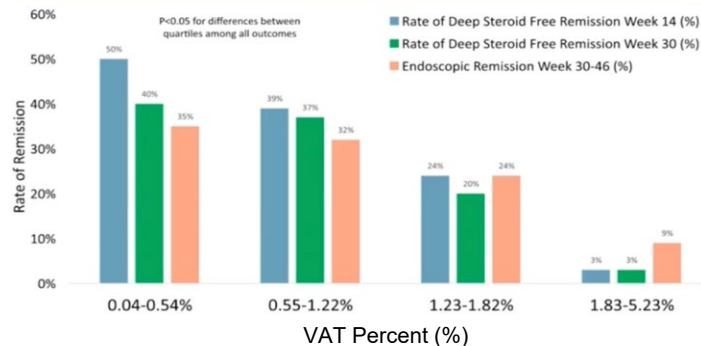


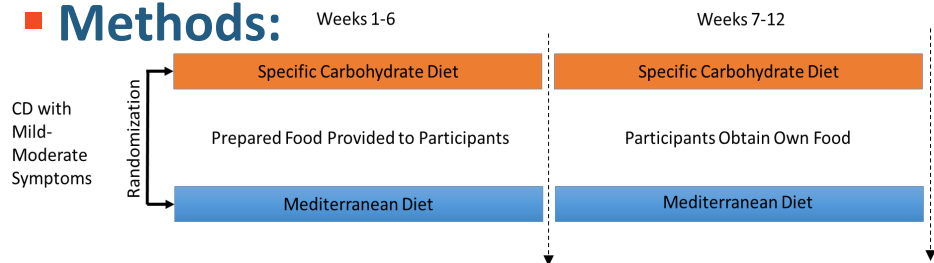
Figure 2: Rate of Remission by VAT %



Specific Carbohydrate and Mediterranean Diet Achieve Similar Clinical Remission Rates in a Randomized Trial in Crohn's Disease



Methods:



Inclusion based on symptoms (sCDAI 176-399) rather than objective disease

Primary Outcome
sCDAI < 150

Secondary Outcomes

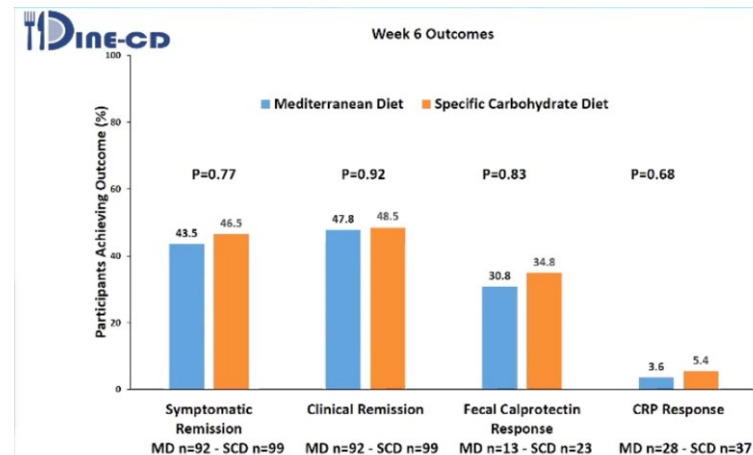
	SCD	Mediterranean diet
High intake	Unprocessed meats, poultry, fish, eggs Most vegetables, fruits and nuts	Olive oil Fruits and vegetables Nuts and cereals
Avoid or limit	Grains and dairy Sweeteners other than honey	Red/processed meat Sweets

Results:

- N = 191 (92 in MD and 99 in SCD)
- No significant difference in symptomatic or clinical remission
- Neither diet associated with normalization of CRP

Baseline	SCM	MD	P-value
Objective inflammation*	50 (52.1)	38 (41.8)	.21
CDAI (Median)	210.0	206.8	.02

*FC > 250 µg/g or hsCRP > 5 mg/L at baseline or definite inflammation on colonoscopy



sCDAI, simple Crohn's disease activity index, MD, Mediterranean diet, SCD, specific carbohydrate diet, FC, fecal calprotectin

Lewis JD, et al. Presented at DDW May 2021. Abstract 781. Lewis JD, et al. Gastroenterology. 2021.

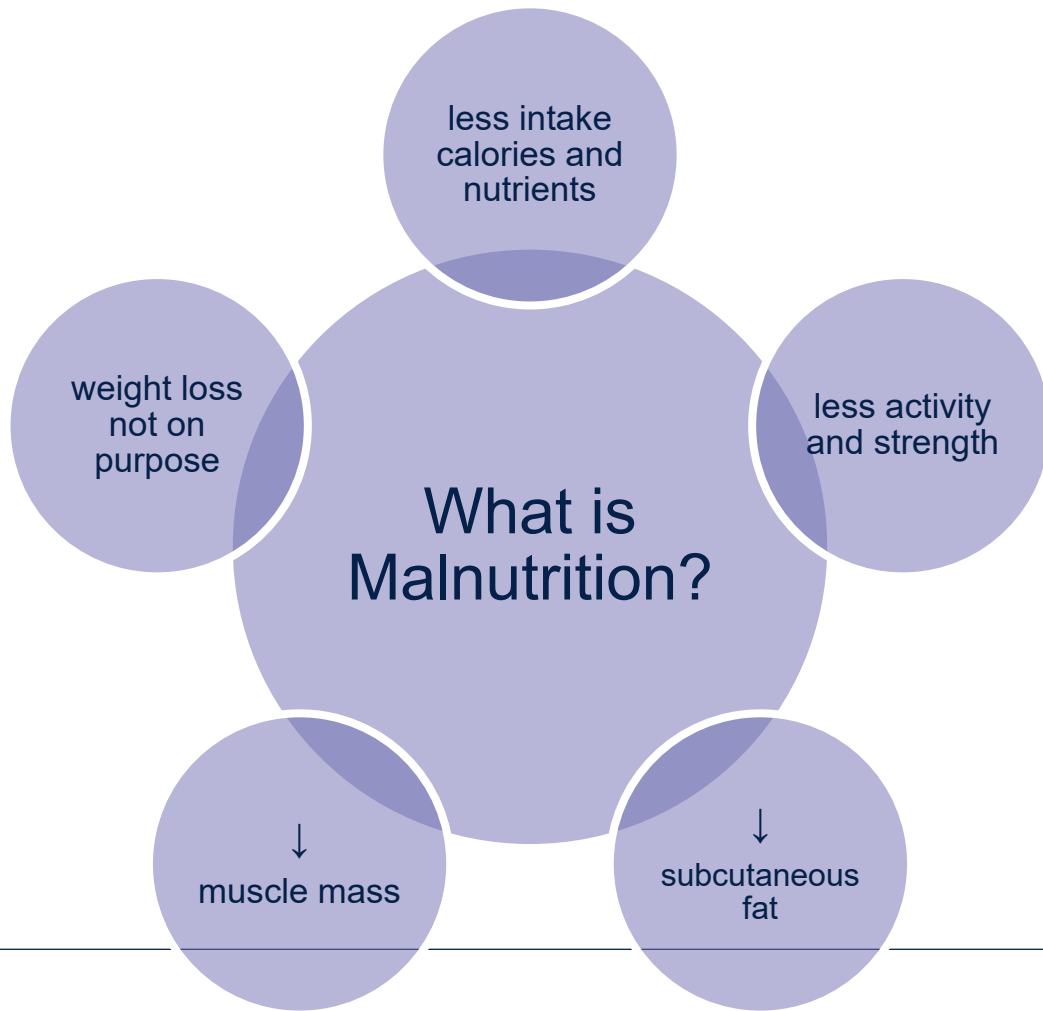
My Story: Seamus Mullen

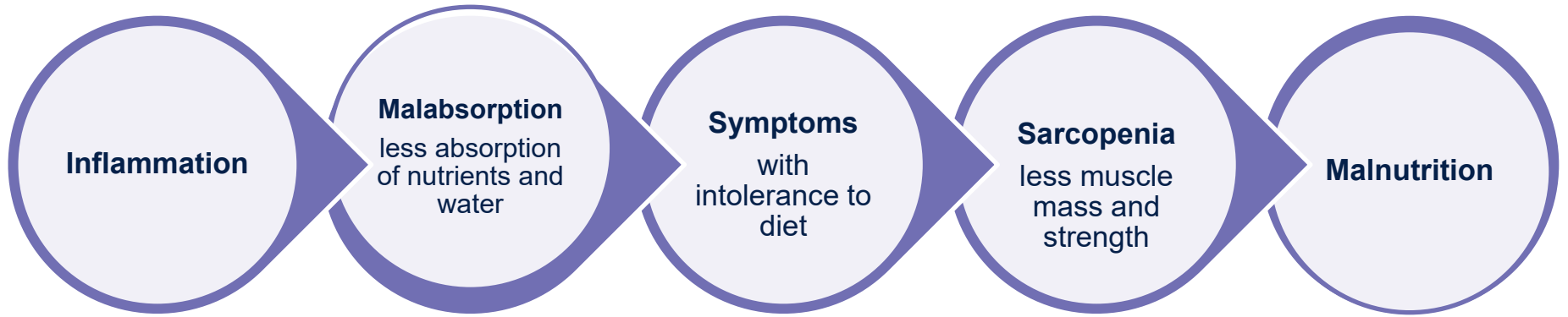




What Should I Eat? Neha Shah

MPH, RD, CNSC, CHES





The Role of Diet in IBD

Increase appetite and intake

Promote a healthy weight

Lessen symptoms

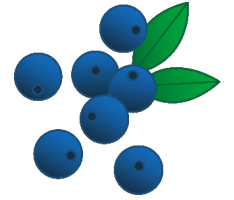
Decrease nutrient deficiencies

Reduce fatigue

Build trust and a healthy relationship with diet

Incorporating good **nutrition** (how to eat) habits into the **diet** (what to eat) can assist in treatment and management of IBD (and malnutrition)

Nutrient of Focus: Fiber



Fiber is the non-digestible part of carbohydrates and found in fruits, vegetables, whole grains, and legumes.



All can be eaten in a diet for IBD.

No need to be a vegetarian or a vegan to eat more plants for fiber. Each meal includes more plants!



The portions and texture is the focus to reduce symptoms during active disease.



Active Disease

Include at least one food with fiber at each meal in at least ½ cup. For raw vegetables, legumes, may need to do in blended, cooked, mashed, and minced forms for tolerance (e.g., fruit/vegetable smoothies, soups, quiche, polenta)



Transition

Re-introduce an extra ½ cup of fiber to one meal for now, then to two meals, and then to three meals. Can try more raw and whole forms of fiber as able (e.g., few orange slices, slice of tomato or lettuce).



Remission

Add 2-3 foods with fiber at each meal eaten (a mix of fruit, vegetable, legume, whole grain)

under the
guidance and
supervision of
a dietitian to
personalize
fiber

- EXAMPLES
banana,
blueberries,
cantaloupe,
honeydew,
kiwi, papaya

- EXAMPLES
whole grains of
oats, millet,
quinoa, wheat

** always include multiple
food groups at each meal,
especially protein*

** make one of the meals a
vegetarian or vegan meal*

** the portions and texture
is personalized*

** drink fluids throughout
the day*

Fruit

Grain

Vegetable

Protein



- EXAMPLES
carrots,
eggplant, green
beans, spinach,
sweet potato

- EXAMPLES
beans, lentils,
nut butters, tofu,
yogurt, cheese



Clinical Trials: Karan Bhatia CRC

SEAMUS: Strictly Eating And Mucosal healing in Ulcerative colitiS

- Pilot feasibility study to assess effectiveness of SEAMUS Diet in improving symptoms in patients with mild to moderate Ulcerative Colitis
- Eligible Patients had mild-moderate UC despite stable therapy
 - Endoscopic and calprotectin evidence of inflammation
- Given list of foods and recipes that they can eat
 - Monthly monitoring by dietician
 - Monthly calprotectin and microbiome stool collection
 - Flexible sigmoidoscopy at baseline and at 6 months (or withdrawal)
 - \$99 stipend monthly for grocery

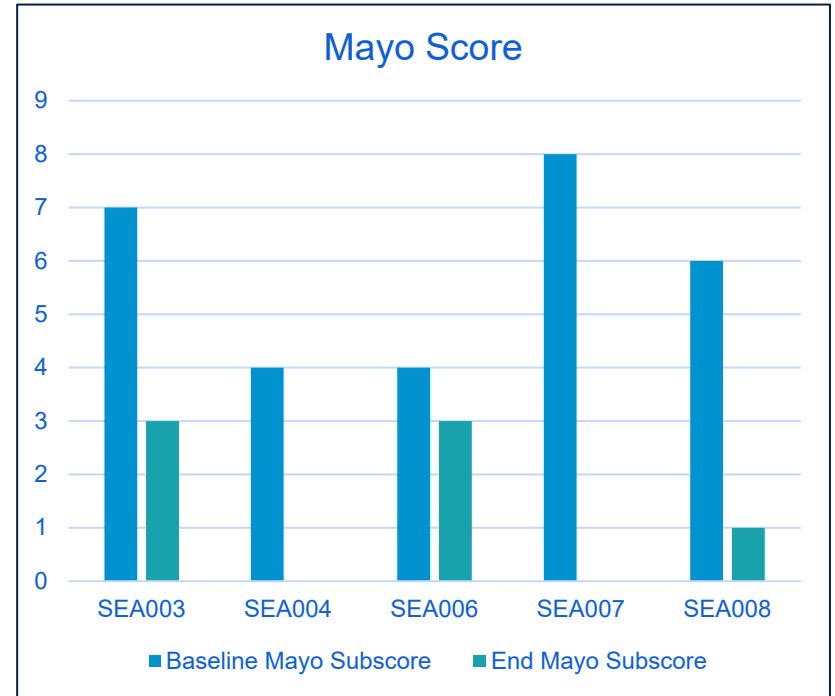
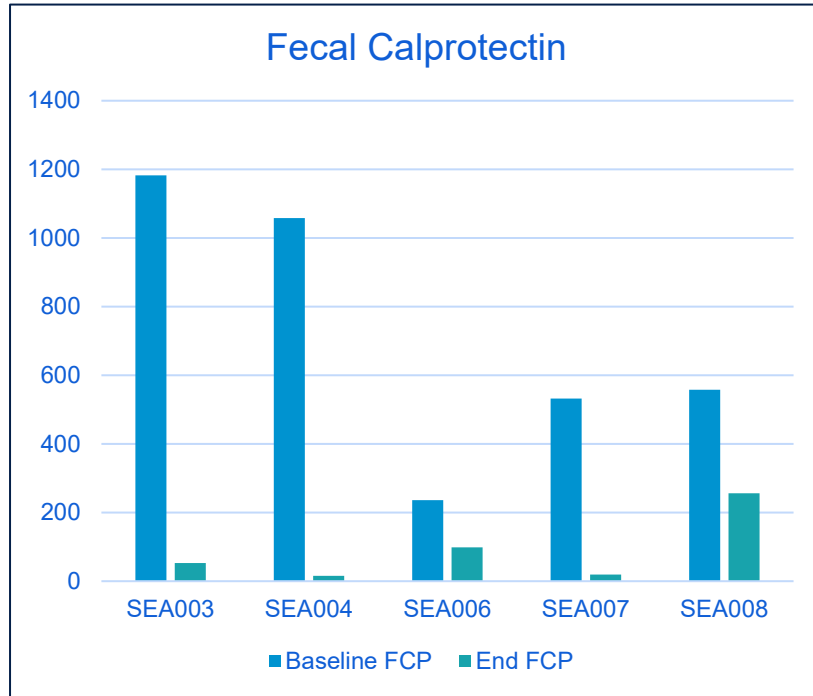
Study Activities

	Screening	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Chart review	X						
ICF	X						
Flex Sigmoidoscopy	X						X
Fecal Calprotectin	X			X			X
CBC	X	X	X	X	X	X	X
ESR	X	X	X	X	X	X	X
CRP	X	X	X	X	X	X	X
Albumin	X	X	X	X	X	X	X
Stool sample	2X	X	X	X	X	X	X
SCCAI	X	X	X	X	X	X	X
Mayo Score	X						X
Weight	X	X	X	X	X	X	X
Vitamin D	X						X
B12	X						X
Folic Acid	X						X
Iron	X						X
Steroid Use Check	X	X	X	X	X	X	X

Recruitment



Fecal Calprotectin and Mayo Scores



IBD Clinical Trials at UCSF

Tigenix Stem Cell Trial

- Phase 3, randomized, double-blind, placebo-controlled, multicenter trial of Cx601 treatment Darvadstrocel
- Treating complex perianal fistulas in patients with Crohn's Disease
- CD in remission or minimally active

Risankizumab

- Phase 3, randomized, double-blind, placebo-controlled, multicenter trial of IL-23 Inhibitor on patients with moderate to severe UC
- Failed at least 1 biologic in the past

MOSAIC: Management Of Severe UC with Ambulatory Intravenous Corticosteroids

- Flaring UC patients
- Studying Safety and satisfaction of IV steroid in an outpatient (no hospital admission) setting for patients with severe acute UC

PIANO Registry

- Multicenter national prospective study of pregnancy and neonatal outcomes in women with IBD
- All pregnant women with IBD encouraged to enroll
- PIANO@ucsf.edu

Twitter: @UCSFIBD
Website: IBD.UCSF.EDU

Q&A