Disclosure of Conflicts of Interest:

Conflict of interest :

Calpro AS Norway, Non-financial support

Ferring International, grant

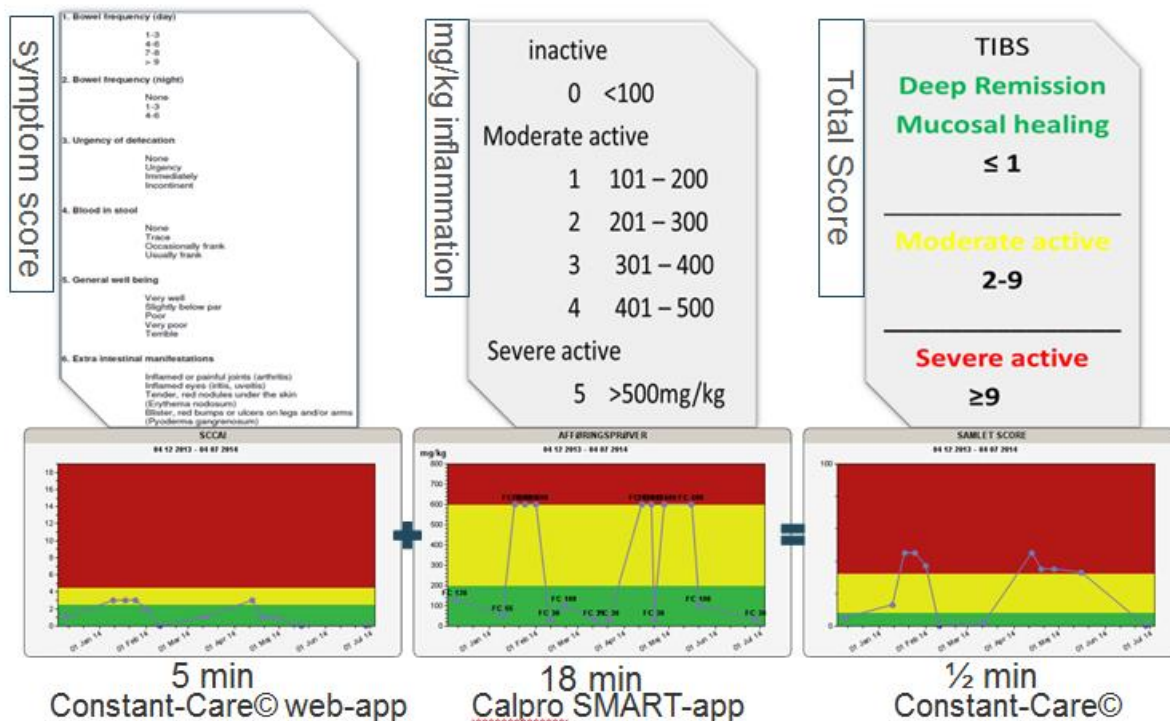Genetic Analysis AS Norway, Non-financial support

Background

- New initiatives are needed to cope with the increased healthcare burden of IBD

- eHealth/mHealth solutions has the potential to reduce time to remission, increase compliance to medical therapy, reduce number of outpatient visits and hospital admissions and not least involve and empower patients

Aim

- Should an eHealth screening procedure for disease activity be implemented in clinical practice 'every 3 months, 3M' or according to patients own gut feeling, 'on demand, OD'

Methods: Randomized controlled trial, 1 year

- 120 were randomized to screen for disease activity 'OD' or every '3M' on the web app noh.constant-care.dk
- Longitudinal FC & disease activity scores → AUC
- Quality of life (s-IBDQ) was also entered in the web app

Burisch and Munkholm, springer 2015

Results, Baseline Characteristics

	3M, n=60	OD, n=60
IBD diagnosis		
Ulcerative colitis	46 (77%)	45 (75%)
Crohn's Disease	11 (18%)	13 (22%)
IBD-U	3 (5%)	2 (3%)
Age (SD; years) & Duration (IQR; years)		
Mean age at inclusion	44.0 (15.0)	47 (19.9)
Median IBD duration	9.5 (4.3-18.0)	7.0 (3.0-16.0)
Disease activity FC (IQR mg/kg)		
Median FC	77 (20-560)	88 (20-603)
Medical treatment		
None	11 (18%)	7 (12%)
5ASA	30 (50%)	35 (58%)
Immunosuppressive	1 (2%)	2 (3%)
Biologicals	8 (13%)	3 (5%)
Combination therapy	10 (17%)	13 (22%)

Results, Follow up

	3M, n=47	OD, n=53	Mean diff 95% CL	p
Drop outs	13 (22%)	7 (12%)		
Months of registrations Median (IQR)	12 (12-13)	12 (12-13)		
Δ s-IBDQ	0.9	6.0	5.1(1.3-8.8)	0.009
Mean no of FC pads used pr. patient	6.7	5.1	1.5(0.2-2.9)	0.03
Disease activity, (disease course, 1 year)*				
AUC, FC (mg*year/kg)	79747 (21392-159729)	62016(18458-182627)		0.97
AUC, SCCAI	549 (92-965)	549 (182-968)		0.58
AUC, HBI	613 (557-2884)	1509 (863-2193)		0.73

* AUC only made on 97 patients due to follow up about 331 days after incl. and not after 357 which is the cut-off for AUC algorithm

Conclusion

- No differences, in disease course (AUC) for FC, HBI and SCCAI, (equally good)

- OD vs. 3M

  - Utilization of FC home-monitoring kits was significantly reduced in the OD group

  - Fewer drop outs in OD group

  - Significant Increased QoL in the OD group

- Individualized home-monitoring is therefore recommended in clinical practice

Acknowledgements

Department of surgery – gastroenterology section
North Zealand University Hospital, Denmark

Pia Munkholm
Johan Burisch
Dorte Marker
Petra Weimers

Nordsjællands Hospital

CONSTANT CARE

Thomas Janum

Corresponding author Dorit Vedel Ankersen: dorit.vedel.ankersen@regionh.dk