2013. Thalidomide kids CD

RCT/Thalidomide/ CD/Induction

Effect of Thalidomide on Clinical Remission in Children and Adolescents With Refractory Crohn Disease: A Randomized Clinical Trial

Multicenter, double-blind, placebo-controlled, randomized trial.
Paediatric patients with active CD despite immunosuppressive treatment were randomized to:
Thalidomide 1.5 to 2.5mg/kg per day or placebo once daily for 8 weeks.
In an OLE, non-responders to placebo received thalidomide for 8w

Primary endpoints: clinical remission at week 8 (PCDAI reduction >24% at w4 and >75% at w8
Primary endpoint for OLE: clinical remission and 75% response

Results:

- Clinical remission w8, 46.4% thalidomide vs 11.5% placebo, p=0.01
- Clinical response at w8 46.4% thalidomide vs 11.5% placebo, p=0.01. No differences in clincal response at w4.
- Incidence of severe adverse events 2.1 per 1000 patient-week, peripheral neuropathy the most frequent.

Conclusion:
In children and adolescents with refractory Crohn disease, thalidomide compared with placebo resulted in improved clinical remission at 8 weeks of treatment and longer-term maintenance of remission in an open-label follow-up. These findings require replication to definitively determine clinical utility of this treatment.

Table 2. Efficacy Data

	Mean (95% CI)			
	Thalidomide (n = 28)	Placebo (n = 26)	RR (95% CI)	*P* Value[a]
Outcomes at Week 4				
Response, No. (%)				
≥75%	5 (17.9)	3 (11.5)	1.54 (0.43 to 5.91)	
≥50%	9 (32.1)	9 (34.6)	0.92 (0.43 to −1.97)	
≥25%	13 (46.4)	14 (53.8)	0.86 (−1.47 to 0.50)	
PCDAI score	21.0 (16.1 to 25.9)	22.0 (16.6 to 27.4)		
Change in ESR, mm/h	−12.7 (−20.7 to −4.7)	−0.4 (−7.3 to 6.5)		.02
Change in CRP, mg/dL	−1.0 (−2.0 to 0)	0.2 (−0.7 to 1.1)		
Change in WAZ	0.12 (0 to 0.24)	−0.09 (−0.20 to 0.02)		
WAZ <−1 SD, No. (%)	12 (42.8)	20 (76.9)	0.55 (0.34 to 0.89)	.02
Change in BMI *z* score	0.14 (0 to 0.28)	−0.13 (−0.28 to 0.02)		
BMI <−1 SD, No. (%)	8 (28.5)	15 (57.6)	0.49 (0.25 to 0.96)	
Physician global assessment score	6.0 (5.5 to 6.5)	5.6 (4.8 to 6.4)		
Change in physician global assessment score	1.0 (0.4 to 1.6)	0.5 (0 to 1.0)		
Outcomes at Week 8				
Clinical remission, No. (%)	13 (46.4)	3 (11.5)	4.0 (1.22 to 12.51)	.01
Response, No. (%)				
≥75%	13 (46.4)	3 (11.5)	4.0 (1.22 to 12.51)	.01
≥50%	18 (64.2)	7 (26.9)	2.3 (1.22 to 4.81)	.01
≥25%	18 (64.2)	8 (30.8)	2.11 (−1.11 to 3.90)	.01
PCDAI score[b]	16.8 (11.5 to 22.1)	26.0 (20.8 to 31.2)		.01
Change in ESR, mm/h	−20.9 (−28.8 to −13)	−1.1 (−4.3 to −2.1)		<.001
Change in CRP, mg/dL	−0.7 (−1.9 to 0.5)	0 (−0.5 to 0.5)		
Change in WAZ	0.18 (0.05 to 0.31)	−0.12 (−0.28 to 0.04)		.006
WAZ <−1 SD, No. (%)	12 (43)	19 (73.0)	0.58 (0.36 to 0.95)	.004
Change in BMI *z* score	0.23 (0.06 to 0.40)	−0.16 (−0.38 to 0.06)		.007
BMI <−1 SD, No. (%)	7 (25)	14 (56)	0.46 (0.22 to −0.96)	.03
Physician global assessment score[c]	6.7 (6.0 to 7.4)	5.3 (4.7 to 5.9)		.01
Change in physician global assessment score	1.7 (0.9 to 2.5)	0.1 (−0.3 to 0.5)		.007

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