

of patients with moderate CD; in this subgroup, high baseline CRP was associated with substantially higher remission rates. This analysis suggests that patients with moderate disease can be treated effectively with adalimumab, especially when there is evidence of inflammation. Prospective studies are warranted to confirm these findings.

Abstract PTU-108 Table 1 Per cent of patients in clinical remission at week 4

	Placebo	ADA80/40	ADA160/80
All patients	12% (9/74)	24% (18/75)	36% (27/76)†
CRP ≥ 10 mg/l, % (n/N)	4% (1/28)	27% (9/33)*	43% (12/28)†
CDAI ≤ 300, % (n/N)	17% (8/46)	29% (13/45)	46% (19/41)†
CRP ≥ 10 mg/l, CDAI ≤ 300, % (n/N)	7% (1/15)	26% (6/23)	57% (8/14)†
CDAI > 300, % (n/N)	4% (1/28)	17% (5/30)	23% (8/35)*
CRP ≥ 10 mg/l, CDAI > 300, % (n/N)	0% (0/13)	30% (3/10)	29% (4/14)

*p<0.05 vs placebo.
†p<0.005 vs placebo.

Competing interests W Sandborn: Grant/Research Support from: Centocor Ortho Biotech, Abbott Laboratories, and UCB Pharma., Consultant for: Centocor Ortho Biotech, Abbott Laboratories, UCB Pharma, and Merck (previously Schering Plough), J-F Colombel: Shareholder with: Intestinal Biotech Development, Grant/Research Support from: Astra-Zeneca, Danisco, Danone, Dysphar, Ferring, Giuliani, Lesaffre, Mapi Naxis, Ocerra Therapeutics, Roquette, Schering-Plough and UCB, Consultant for: Abbott Laboratories, ActoGenix NV, Albireo Pharma, Astra Zeneca, Bayer Schering Pharma, Biogen Idec, Boehringer-Ingelheim, Bristol-Myers Squibb, Cellerix, Centocor, Chemocentryx, Cosmo Technologies, Danone France, Elan, Genentech, Giuliani, Given Imaging, GlaxoSmithKline, Merck, Millennium, NeoVacs, Ocerra, Otsuka American, PDL Biopharma, Pfizer, Ribo Vacs Biotech, Schering-Plough, Shire, Synta, Teva and Petah Tikva, Therakos, UCB, and Wyeth, Speaker bureau with: Abbott Laboratories, Astra Zeneca, Centocor, Elan, Falk, Ferring, Given Imaging, Otsuka American, PDL, Schering-Plough, Shire and UCB, M Castillo Shareholder with: Abbott, Employee of: Abbott, Q Zhou Employee of: Abbott, R Thakkar Shareholder with: Abbott, Employee of: Abbott.

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PTU-109 EFFICACY AND SAFETY OF ADALIMUMAB IN MODERATE COMPARED WITH SEVERE CROHN'S DISEASE: POOLED DATA FROM THE CHARM AND EXTEND TRIALS

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Introduction The efficacy of adalimumab (ADA) in Crohn's disease (CD) by disease duration has been explored,¹ but efficacy and safety of ADA by disease severity have not been investigated. The CHARM² and EXTEND³ trials assessed ADA treatment for the maintenance of remission in patients with moderate to severe CD. Results from CHARM and EXTEND in patients with moderate vs severe CD were pooled to assess efficacy and safety by disease severity.

Methods This analysis of pooled data were performed to assess clinical response and clinical remission at week 56 (CHARM) or 52 (EXTEND) in patients with moderate (CDAI ≤300) or severe (CDAI >300) CD, treated with blinded ADA every other week (eow) or placebo. In both trials, patients received open-label ADA induction (CHARM: 80 mg at week 0, 40 mg at week 2; EXTEND: 160 mg at week 0, 80 mg at week 2), followed by blinded treatment (ADA 40 mg eow or weekly, or placebo in CHARM, 40 mg eow or

placebo in EXTEND) from weeks 4 to the end of the trial (week 56 in CHARM, week 52 in EXTEND). Data from the ADA 40 mg eow arm of CHARM was pooled with data from EXTEND; safety and efficacy (proportion of patients in clinical remission, defined as CDAI<150, or clinical response, defined as at least a 70 point decrease in CDAI [CR70]) at week 56/52 were assessed for patients who achieved CR70 at week 4, separated by baseline disease severity (moderate or severe).

Results A total of 438 patients were included in the pooled analysis: 187 with moderate CD (placebo: 92; ADA: 95) and 251 with severe CD (placebo: 126; ADA: 125). For both moderate and severe CD groups, a statistically significantly greater proportion of patients treated with ADA 40 mg eow achieved clinical response and clinical remission at week 56/52 compared with placebo treated patients (Abstract PTU-109 table 1). The safety profiles in the moderate and severe CD subgroups were similar.

Abstract PTU-109 Table 1 Clinical response (CR70) and clinical remission at week 56/52, by baseline CDAI: pooled data from CHARM and EXTEND

	CDAI ≤300			CDAI >300		
	Placebo	ADA 40 mg eow	p Value*	Placebo	ADA 40 mg eow	p Value*
CR70 (%)	16	44	<0.001	14	44	<0.001
Clinical remission (%)	14	40	<0.001	7	34	<0.001

*ADA vs placebo.

Conclusion The analysis of the pooled data from CHARM and EXTEND suggests that ADA 40 mg eow is safe and effective for the treatment of either moderate or severe CD.

Competing interests J-F Colombel Shareholder with: Intestinal Biotech Development, Grant/Research Support from: Astra-Zeneca, Danisco, Danone, Dysphar, Ferring, Giuliani, Lesaffre, Mapi Naxis, Ocerra Therapeutics, Roquette, Schering-Plough, and UCB, Consultant for: Abbott Laboratories, ActoGenix NV, Albireo Pharma, Astra Zeneca, Bayer Schering Pharma, Biogen Idec, Boehringer-Ingelheim, Bristol-Myers Squibb, Cellerix, Centocor, Chemocentryx, Cosmo Technologies, Danone France, Elan, Genentech, Giuliani, Given Imaging, GlaxoSmithKline, Merck, Millennium, NeoVacs, Ocerra, Otsuka American, PDL Biopharma, Pfizer, Ribo Vacs Biotech, Schering-Plough, Shire, Synta, Teva and Petah Tikva, Therakos, UCB, and Wyeth, Speaker bureau with: Abbott Laboratories, Astra Zeneca, Centocor, Elan, Falk, Ferring, Given Imaging, Otsuka American, PDL, Schering-Plough, Shire and UCB, W Sandborn Grant/Research Support from: Centocor Ortho Biotech, Abbott Laboratories, and UCB Pharma, Consultant for: Centocor Ortho Biotech, Abbott Laboratories, UCB Pharma, and Merck (previously Schering Plough), M Castillo Shareholder with: Abbott, Employee of: Abbott, Q Zhou Employee of: Abbott, R Thakkar Shareholder with: Abbott, Employee of: Abbott.

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PTU-110 ELEVATED C REACTIVE PROTEIN IN ANTI-TNF-NAIVE PATIENTS IS ASSOCIATED WITH HIGHER REMISSION RATES

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Introduction The CHARM trial¹ demonstrated that adalimumab (ADA) was effective for the maintenance of remission in patients with moderate to severe Crohn's disease (CD), and that remission rates are influenced by a patient's baseline C reactive protein (CRP)

concentration and prior anti-TNF experience.¹ Patients who were either anti-TNF-naïve or had an elevated baseline CRP achieved higher rates of remission than the general study population. In this post hoc analysis we examined whether patients who were anti-TNF-naïve and had an elevated CRP at baseline could achieve higher remission rates than those previously reported.

Methods Data from CHARM, a 56-week, randomised, placebo-controlled trial of ADA maintenance therapy, were analysed. All patients received open-label ADA during a 4-week induction period, and were then randomised to ADA (40 mg weekly or every other week [eow]) or placebo for a 52-week double-blind period. In this analysis, clinical remission at week 56 was determined for randomised responders (patients who had a decrease in CDAI ≥ 70 at week 4 compared with baseline) who were naïve to prior anti-TNF treatment, by baseline CRP subgroups (high: ≥ 10 mg/l, vs low: < 10 mg/l), using non-responder imputation. Remission rates for patients treated with weekly or eow ADA were compared with rates for placebo-treated patients, using Fisher's exact test.

Results ADA treatment (weekly or eow) resulted in statistically significantly greater rates of clinical remission at week 56 compared with placebo treatment in each CRP subgroup of anti-TNF-naïve patients (Abstract PTU-110 table 1). The percentage of patients in clinical remission was greater in the high CRP subgroup for both weekly and eow ADA treatment.

Abstract PTU-110 Table 1 Clinical remission at week 56 in anti-TNF-naïve patients in CHARM

	Placebo n/N (%)	ADA 40 mg eow n/N (%)	p Value* n/N (%)	ADA 40 mg weekly n/N (%)	p Value*
Baseline CRP < 10 mg/l	6/46 (13)	17/49 (35)	0.017	18/43 (42)	0.004
Baseline CRP ≥ 10 mg/l	6/43 (14)	19/36 (53)	< 0.001	23/43 (53)	< 0.001

*p Value vs placebo, from Fisher's exact test.

Conclusion In the CHARM trial, anti-TNF-naïve patients with baseline CRP ≥ 10 mg/l experienced greater rates of clinical remission, regardless of ADA dose frequency, compared with patients with baseline CRP < 10 mg/l.

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PTU-111

BASELINE C REACTIVE PROTEIN IS ASSOCIATED WITH DISEASE PROGRESSION IN PATIENTS WITH CROHN'S DISEASE

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Introduction Elevated C reactive protein (CRP), a marker of inflammation, is known to correlate with Crohn's disease (CD) activity^{1,2} and to be a predictor of disease relapse in CD.^{3,4} However, in patients with moderate or severe CD it is not known whether CRP is associated with disease progression.

Methods This post hoc analysis evaluated the association of baseline (BL) CRP and change in CDAI over time in patients with moderate (CDAI > 220 to ≤ 300) to severe (CDAI > 300) CD who were randomised to the placebo group in the CHARM trial⁵ (N=238). Patients received open-label adalimumab (ADA) induction (week 0: 80 mg; week 2: 40 mg) followed by blinded weekly placebo treatment from weeks 4–56, with switch to open-label ADA allowed after week 12 for disease flare. This analysis grouped patients by CD severity and BL CRP (severe, high: CDAI > 300 , CRP ≥ 10 mg/l; severe, low: CDAI > 300 , CRP < 10 mg/l; moderate, high: CDAI ≤ 300 , CRP ≥ 10 mg/l; moderate, low: CDAI ≤ 300 , CRP < 10 mg/l). Mean CDAI scores at each visit from weeks 4–56 were calculated for each subgroup, using last observation carried forward (after week 4) to handle dropouts or switch to ADA.

Results CDAI decreased from BL in all subgroups after ADA induction (Week 4, Abstract PTU-111 table 1). By week 56, the mean CDAI in all subgroups had increased compared with week 4, and was greater in patients who had higher CRP vs lower CRP at BL (244 vs 223, 306 vs 260, for moderate and severe groups, respectively). In patients with moderate CD and high CRP, week 12 and week 56 CDAI approached that of patients with severe CD and low CRP, despite BL differences in CDAI of over 90 points (week 12: 235 vs 243; week 56: 244 vs 260).

Abstract PTU-111 Table 1 Mean CDAI over time

	Severe (CDAI > 300)		Moderate (CDAI ≤ 300)	
	CRP < 10 mg/l N = 60	CRP ≥ 10 mg/l N = 87	CRP < 10 mg/l N = 70	CRP ≥ 10 mg/l N = 44
BL CRP, mg/l, median (range)	2.5 (0.2–9.7)	33.6 (10.1–287.0)	4.2 (0.2–9.9)	31.4 (10.1–104.0)
BL CDAI, mean (SD)	348 (46)	370 (49)	259 (24)	254 (32)
Wk 4 CDAI, mean (SD)	243 (85)	242 (96)	162 (68)	174 (70)
Wk 12 CDAI, mean (SD)	243 (102)	286 (109)	190 (85)	235 (120)
Wk 56 CDAI, mean (SD)	260 (95)	306 (114)	223 (91)	244 (116)

Conclusion This post hoc analysis of disease activity and CRP demonstrates that an elevated BL CRP in patients with moderate or severe CD is associated with higher disease scores after 1 year. Disease activity over time in patients with moderate CD and higher CRP behaved similarly to that of patients with severe CD and lower CRP.

Competing interests J-F Colombel Shareholder with: Intestinal Biotech Development, Grant/Research Support from: Astra-Zeneca, Danisco, Danone, Dysphar, Ferring, Giuliani, Lesaffre, Mapi Naxis, Ocerra Therapeutics, Roquette, Schering-Plough, and UCB, Consultant for: Abbott Laboratories, ActoGenix NV, Albireo Pharma, Biogen Idec, Boehringer-Ingelheim, Bristol-Myers Squibb, Cellierix, Centocor, Chemocentryx, Cosmo Technologies, Danone France, Elan, Genentech, Giuliani, Given Imaging, GlaxoSmithKline, Merck, Millennium, NeoVacs, Ocerra, Otsuka American, PDL Biopharma, Pfizer, Ribo Vacs Biotech, Schering-Plough, Shire, Synta, Teva and Petah Tikva, Therakos, UCB, and Wyeth, Speaker bureau with: Abbott Laboratories, Astra Zeneca, Centocor, Elan, Falk, Ferring, Given Imaging, Otsuka American, PDL, Schering-Plough, Shire and UCB, W Sandborn Grant/Research Support from: Centocor Ortho Biotech, Abbott Laboratories, and UCB Pharma, Consultant for: Centocor Ortho Biotech, Abbott Laboratories, UCB Pharma, and Merck (previously Schering Plough), M Castillo Shareholder with: Abbott, Employee of: Abbott, B Huang Shareholder with: Abbott, Employee of: Abbott, Q Zhou