Initial ozanimod Crohn's disease data in UEGW abstracts: Abstracts were released today for the 2017 United European Gastroenterology Week (UEGW) Meeting, which is being held from 10/28/17-11/01/17 in Barcelona. The key abstract for our coverage was PhII data from Celgene's oral S1P receptor modulator ozanimod in Crohn's. Ozanimod has completed late-stage studies for multiple sclerosis, with detailed PhIII data to be presented at ECTRIMS 2017 later this month, and has on-going PhIIIs for ulcerative colitis, with data is due in 2018.

Comparisons are difficult because of lack of placebo arm, but ozanimod appears to have similar activity to oral JAKs: As has previously been the case with oral Crohn's agents, meaningful comparisons are challenging given the varying data points provided, differences in baseline characteristics, different exposures to prior therapies, and the inclusion/exclusion of placebo arms across studies. However, we conducted a rough comparison of ozanimod in Crohn's to AbbVie's JAK inhibitor upadacitinib (also available in the abstracts released today), filgotinib, and GED-0301. Data for filgotinib and GED-0301 was presented at UEGW 2016. The efficacy measures are not adjusted for placebo as the ozanimod and GED-0301 studies did not include a placebo arm. Endoscopic improvement readings for all studies were centrally reviewed.

Efficacy Comparison of Oral Crohn's Agents in Development

Therapy	Company	Mechanism	Patients	Dosing	Duration	Baseline Characteristics (Mean)				SES-CD Improvement		CDAI R
						CDAI	SES-CD	CD Duration	Prior biologic exposure	≥25%	≥50%	Decrease ≥100
Ozanimod*	Celgene	S1P receptor modulator	60	1mg QD	12 weeks	320	13.3	10 years	54%	43.3%	26.7%	66%
Filgotinib**	Galapagos	JAK1 inhibitor	174	200mg QD	10 weeks	293	14.2-15.8	8.3 years	56%-64%		25%	
GED-0301**	Celgene	Smad7 antisense	52	160mg QD	12 weeks	294	11.2	11.6 years	46%	37%	15%	
Upadacitinib^**	AbbVie	JAK1 inhibitor	180	3mg, 6mg, 12mg, 24mg BID or 24mg QD	16 weeks	303		13.2 years	96%	50%	33%	56%

* Patients with SES-CD ≤12 had a greater endoscopic response, with 50% with a 25%+ improvement and 35.7% with a 50%+ improvement
** 50%+ responder rate was 25% by central review and 39% by investigator review
# For patients with SES-CD>12, 63% experienced 25%+ endoscopic improvement and 31% experienced 50%+ endoscopic improvement
^ 96% of subjects had failed or were intolerant to TNF antagonists; endoscopic and clinical results provided for 24mg BID dosing

Source: Company Data

Both ozanimod and filgotinib appear to have similar activity. However, we note that baseline SES-CD scores (lower on ozanimod), treatment duration (2 weeks longer for ozanimod) and lack of a placebo arm (11% for filgotinib) all point to better potential activity for filgotinib. In comparison to GED-0301, ozanimod led to a ~2x 50% responder rate despite baseline SES-CD being ~20% higher, suggesting a much stronger response. A comparison to AbbVie's upadacitinib is difficult as AbbVie did not provide baseline SES-CD, but overall efficacy seems loosely in line. However, we note there is the potential for safety concerns with upadacitinib, as the abstract notes that infections were numerically higher with treatment, two GI perforations were reported on two separate doses of upadacitinib, two adjudicated CV events were reported in the 12mg BID group, and there were 3 events of grade 3 hemoglobin decrease. Little safety detail is provided for ozanimod, but the abstract notes that AEs and SAEs seemed related to underlying disease.