Dose escalated therapy improving outcomes in inflammatory bowel disease – Crohn's Colitis Cure (CCC) Data Insights Program

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INTRODUCTION & AIM

- Biologic therapies are effective medications in Inflammatory Bowel Disease (IBD).
- Many people do not achieve an adequate or sustained response to standard dosing.
- We examined the need for dose escalation (DE) and subsequent outcomes.

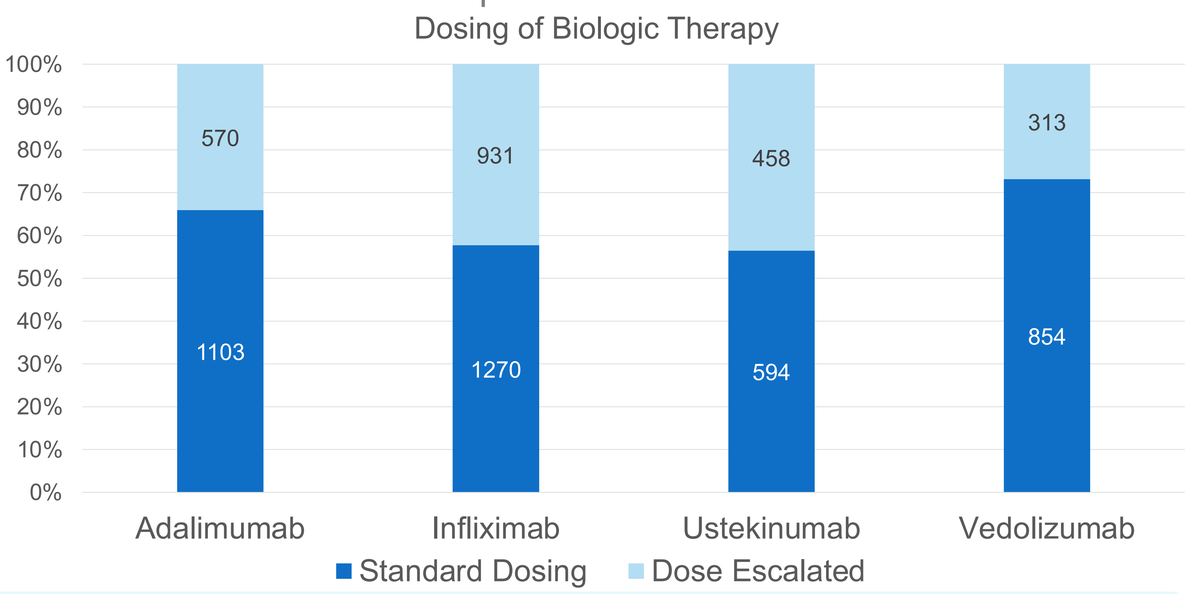
METHOD

- Crohn's Colitis Care (CCCare) is a cloud-based electronic medical record (EMR) used in Australia and New Zealand. Data feed into a de-identified clinical quality registry (CQR), which was interrogated in April 2024.
- Inclusion: People with IBD receiving Adalimumab, Infliximab, Ustekinumab, or Vedolizumab.
- DE was defined as maintenance dosing greater than:
  - 40 mg subcutaneous Q2 weekly for Adalimumab.
  - 5 mg/kg intravenous Q8 weekly OR 120 mg subcutaneous Q2 weekly for Infliximab.
  - 300 mg IV Q8 Weekly OR 108 mg subcutaneous Q2 weekly for Vedolizumab.
  - 90 mg subcutaneous for Ustekinumab.
- We examined data prior to and 12 months post DE.

Remission Rates	Pre DE	12 months post DE	P-Value
Faecal Calprotectin (< 250 µg/g), n (%)	320 (43.8)	410 (59.7)	< 0.001
PRO2 Remission, n (%)	910 (66.8)	1094 (75.5)	< 0.001
Radiological Remission, n (%)	423 (76.1)	294 (71.7)	0.14
Endoscopic Remission, n (%)	203 (21.9)	214 (38.5)	< 0.001
Systemic steroid use, n (%)	195 (8.6)	76 (3.5)	< 0.001
Healthcare Utilisation	**Pre DE**	**12 months post DE**	**P-Value**
Hospital admissions, n	333	203	0.91
Endoscopies, n	1275	803	< 0.001
Radiology, n	1136	876	< 0.001
Clinical Assessments, n	4248	4224	0.67
Helpline calls, n	3890	4345	< 0.05

RESULTS

- **6,093** eligible people, **2,272 (37.3%)** received DE therapy.
- 4,208 (69.1%) had Crohn's Disease (CD), 1,765 (29,0%) had Ulcerative Colitis, 115 (1.9%) had IBD-Unclassifed.
- **39.8%** (n=1673) of people with CD required DE, **32.2%** (n=568) of UC and **27.0%** (n=31) of IBDU.
- Median age = **40 years** (IQR 30 - 53), **50.2%** were male.
- Median time to DE = **5 months** (IQR 0 – 19).
- **1,685 (74.2%)** remained on DE therapy beyond 12 months.
- Those who required DE therapy, more people were currently smoking compared to those receiving standard therapy (**11.3% vs 9.6%,** $p < 0.05$).
- Statistically significant increase in remission rates as measured by:
  - Faecal Calprotectin < 250 ug/g increased by **28.1%.**
  - Patient-reported outcome (PRO2) increased by **20.2%.**
  - Endoscopic remission increased by **5.4%.**
  - Systemic steroid use reduced by **61%.**
- Reduction in healthcare utilisation in the 12 months following DE:
  - **37%** reduction in endoscopies performed.
  - **22.9%** reduction in radiology investigations.
  - **39%** reduction in admissions.
  - **11.7%** increase in helpline calls.



CONCLUSIONS

- Dose escalation is associated with significantly improved rates of remission and reduction in healthcare utilisation.
- The cost of DE therapy is not government subsidised in Australia and New Zealand. People with IBD rely on compassionate access schemes of pharmaceutical companies, in turn delaying adequate disease control, thereby patient's well-being and increasing the workload of healthcare providers due to the application and follow up process.
- Further health economic analysis is required to further guide healthcare resource allocation.

For more information contact: info@c-c-cure.org, or visit www.c-c-cure.org