

A Comparative Analysis of TNF Antagonists in the Treatment of Crohn's Disease: Relationship of Molecular Structure and Mechanism of Action to Biologic Activity

CME Post-test

Please answer each question by writing the letter corresponding to the correct answer in the grid found on the evaluation form. You must answer at least 70% of the questions correctly to obtain CME credit.

- Which of the following TNF antagonists has been documented to be ineffective in the induction of remission or clinical response in patients with Crohn's disease?
 - Infliximab
 - Adalimumab
 - Etanercept
 - Certolizumab pegol
 - None of the above
- Infliximab is effective in treating both luminal and fistulizing Crohn's disease.
 - True
 - False
- In CHARM, patients with Crohn's disease who responded to adalimumab induction therapy were placed on maintenance therapy consisting of adalimumab 40 mg every other week or weekly. Compared to placebo, adalimumab was shown to:
 - Result in significantly higher remission rates at weeks 26 and 56
 - Be equally effective at every other week and weekly dosing regimens
 - Result in significantly higher rates of healing of draining fistulas at weeks 26 and 56
 - All of the above
- In PRECiSE 1, both induction and maintenance of clinical response and remission with certolizumab pegol were evaluated. Which of the following statements describes the results of this study?
 - Certolizumab was significantly more effective than placebo in maintaining remission at weeks 6 and 26
 - Certolizumab was significantly more effective than placebo in maintaining a CR100 clinical response at weeks 6 and 26
 - Certolizumab was significantly more effective than placebo in maintaining clinical response and remission only in patients with CRP levels > 10 mg/L
 - All of the above
- There is direct clinical evidence in the literature linking the efficacy of infliximab in Crohn's disease to its ability to induce apoptosis in lamina propria T lymphocytes.
 - True
 - False
- Postulated mechanisms by which TNF antagonists exert their anti-inflammatory effects in patients with Crohn's disease include:
 - "Reverse signaling" by binding membrane-bound TNF
 - Complement-mediated lysis of TNF-bearing T lymphocytes
 - Neutralization of soluble TNF
 - a and b only
 - a and c only
 - All of the above
- While the incidence of ANA and anti-dsDNA increases with the use of TNF antagonists, no correlation has been found between the incidence of these autoantibodies and the occurrence of systemic lupus erythematosus.
 - True
 - False
- Despite the absence of head-to-head comparisons, which of the following statements regarding the immunogenicity of TNF antagonists are supported by clinical evidence?
 - Scheduled maintenance with infliximab results in higher rates of anti-infliximab antibodies than episodic maintenance therapy
 - The use of a concomitant immunomodulator with any TNF antagonist significantly reduces the incidence of antibodies against the anti-TNF agent.
 - Even when used with an immunomodulator, the incidence of antibodies against any of the TNF blockers remains $\geq 10\%$
 - All of the above
 - None of the above
- Postmarketing registries with infliximab and adalimumab in child-bearing women have not revealed adverse outcomes to newborns.
 - True
 - False
- Our current understanding of the significant differences in mechanism of action among the TNF antagonists allows clinicians to make informed choices in selecting one agent over another.
 - True
 - False

A Comparative Analysis of TNF Antagonists in the Treatment of Crohn's Disease: Relationship of Molecular Structure and Mechanism of Action to Biologic Activity

Post-test Answers and Activity Evaluation

CME REGISTRATION

Please print clearly

Name _____

Address _____

City _____

State _____ Zip Code _____

Affiliation _____

Degree(s) _____ Telephone _____

Email _____

Evaluation

Please circle one

	Not applicable	Strongly disagree	Disagree	Agree	Strongly agree
The activity will likely influence my practice.	N/A	1	2	3	4
The activity extended and/or updated my knowledge base.	N/A	1	2	3	4
The activity reinforced my current understanding of the topic.	N/A	1	2	3	4
The activity gave me some new ideas.	N/A	1	2	3	4
The activity content met its objectives.	N/A	1	2	3	4
The technical quality of the activity was acceptable.	N/A	1	2	3	4
I would recommend this program to my peers.	N/A	1	2	3	4

Were you adequately informed of commercial sponsorship? Yes No

Do you think the overall activity was biased toward certain commercial product or services? Yes No

Were disclosures of the presence or absence of significant commercial relationships of the authors and activity planners provided? Yes No

Post-test Answer Grid

Insert the letter that corresponds to the correct answer to each question.

1	2	3	4	5
6	7	8	9	10

Complete and return this form by mail to:

Elsa Kurien, MA, MEd
 Administrative Director of CME, Office of Clinical Affairs
 Chicago Medical School at Rosalind Franklin University
 of Medicine and Science
 3333 Green Bay Road
 North Chicago, IL 60064

Or by fax to: 847-578-3320

Please call 847-578-3341 with any questions about certification.