

**Food and Drug Administration
Center for Drug Evaluation and Research**

Endocrinologic and Metabolic Drugs Advisory Committee

**Holiday Inn Bethesda
8120 Wisconsin Avenue, Bethesda, MD**

**Questions
July 26, 2001**

NDA 21-332, Symlin™ (pramlintide acetate) Amylin Pharmaceuticals, Inc.

EFFICACY

1. Based on the information presented by the sponsor in the NDA, are the data adequate to establish the efficacy of pramlintide in combination with insulin for the treatment of patients with
 - a. Type 1 DM?
 - b. Type 2 DM?

If the answer to either of the above is no, what additional data would be required?

2. Based on the information presented by the sponsor in the NDA, were the study designs adequate to guide physicians in the effective use of pramlintide in combination with insulin in
 - a. Type 1 DM?
 - b. Type 2 DM?

Consider with regard to

- i. identification of effective dose(s) of pramlintide
- ii. adjustments of the insulin regimen to achieve optimum glycemic control
- iii. use of pramlintide under conditions of strict glycemic control (i.e., to meet or exceed ADA goals)

If the answer to either of the above is no, what additional data would be required?

SAFETY

3. Based on the information presented by the sponsor in the NDA, are the data adequate to define the safety profile of pramlintide when used in combination with insulin in
 - a. Type 1 DM?
 - b. Type 2 DM?

If the answer to either of the above is no, what additional data would be required?

4. Based on the information provided, were the study designs adequate to guide physicians in the safe use of pramlintide in combination with insulin in
 - a. Type 1 DM?
 - b. Type 2 DM?

Consider in particular with regard to the risk of hypoglycemia

- i. during initiation of therapy (i.e., safe use in the early stages of therapy)
- ii. during chronic therapy (i.e., adjustments of insulin and/or pramlintide dose)
- iii. under conditions of strict glycemic control

APPROVABILITY

5. Based on the data presented in the NDA and the adequacy of the trial designs, do you recommend approval of pramlintide for use in combination with insulin in
 - a. Type 1 DM?
 - b. Type 2 DM?

If the answer to either of the above is no, what additional data would be required?

6. If the answer to either question in #5 is yes, please comment on the manner in which hypoglycemia risk should be addressed in labeling (e.g., bolded Warning, Black Boxed Warning, etc.).

ADDITIONAL STUDIES

7. Regardless of your recommendations above, what additional studies do you recommend in patients with Type 1 and Type 2 DM for further address the safety, efficacy, or balance of risk and benefit of pramlintide?.

