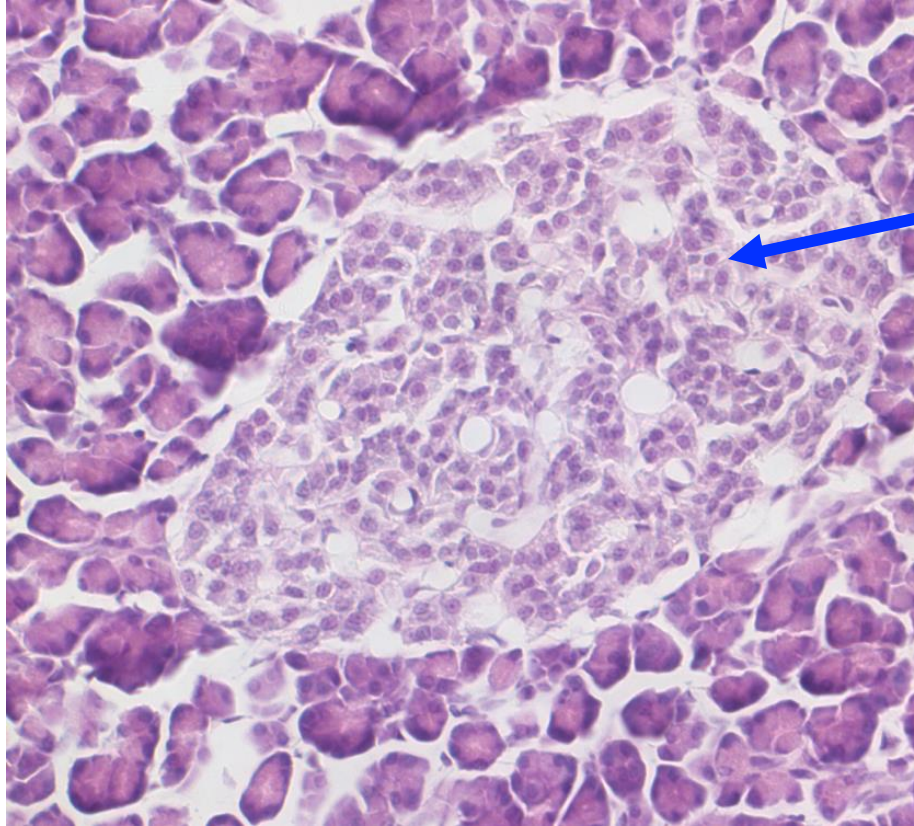


Quiz Section Test 3-AB
Answers are given in red.

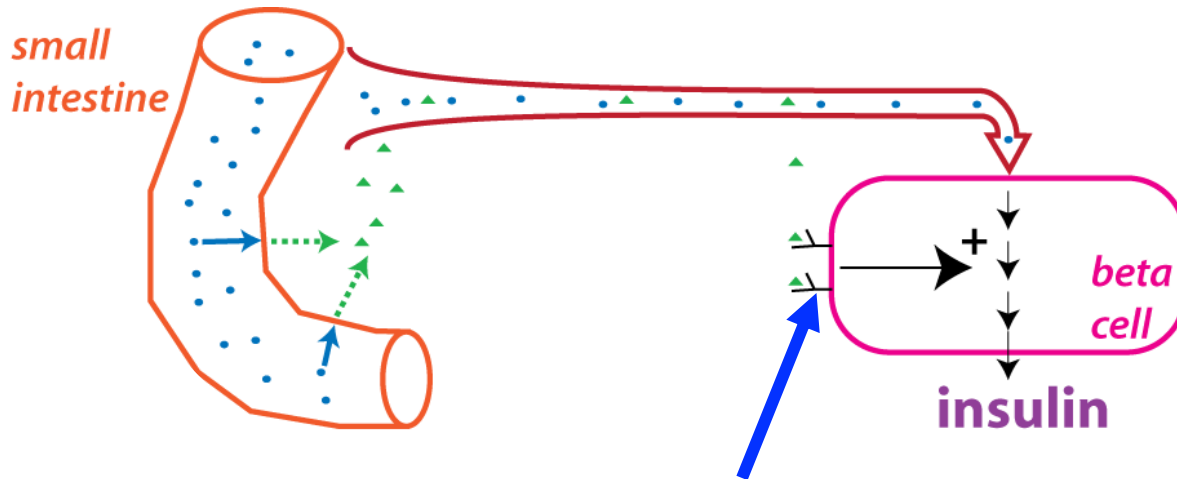


1. Which of the following cell types would you find in the location indicated by the arrow?

- a. enterocyte
- b. acinar cell
- c. follicle cell
- d. **beta cell**
- e. duct cell

2. In which type of diabetes mellitus is there an absolute insulin deficiency requiring treatment with insulin replacement?

Type 1 diabetes mellitus



3. Which of the following drugs acts directly on the protein indicated by the arrow?

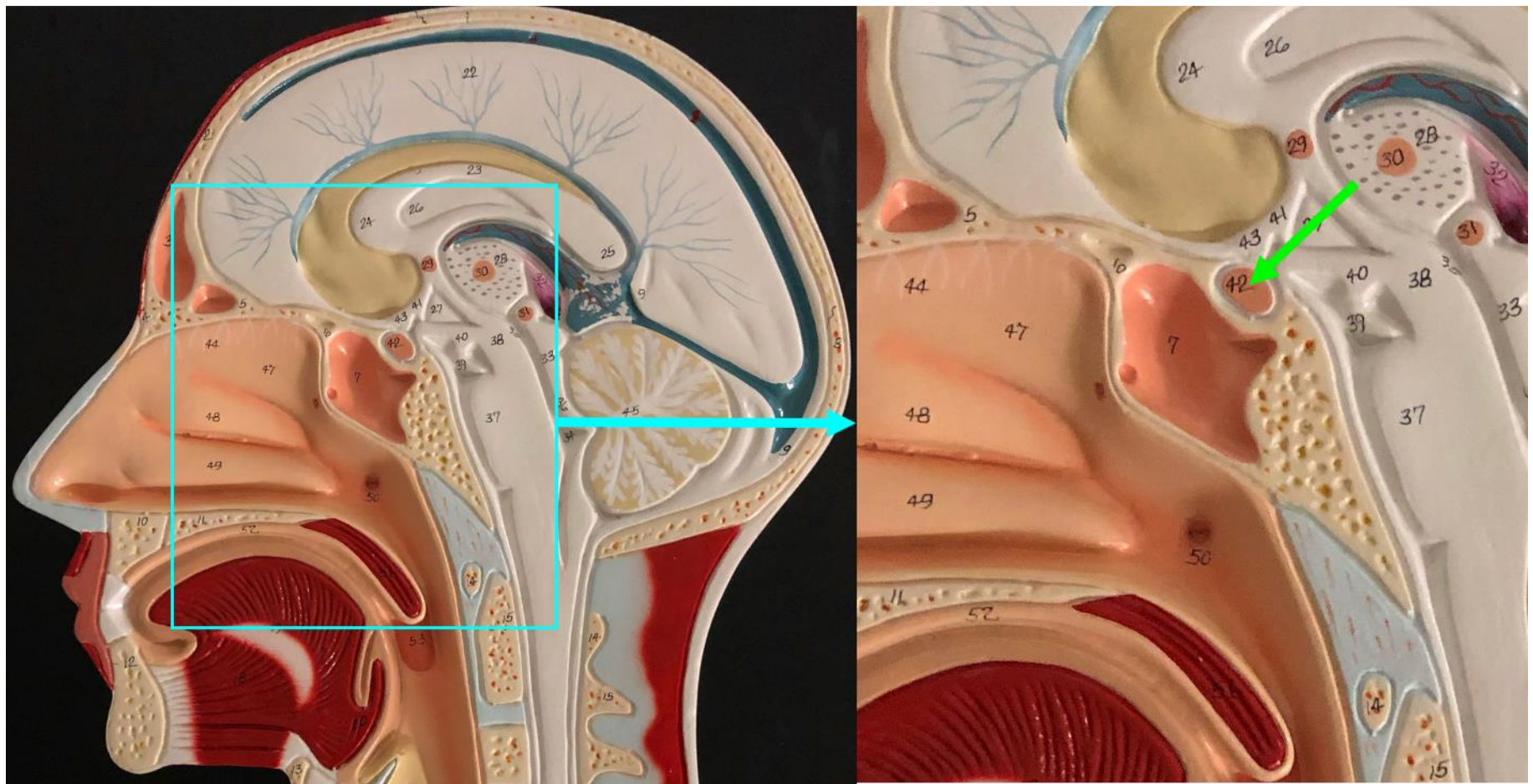
- a. DPP-4 inhibitor
- b. metformin
- c. sulfonylurea
- d. GLP-1 agonist**
- e. SGLT2 inhibitor

4. Which of the following is the most widely used drug for the treatment of type 2 diabetes mellitus? This drug is usually the first drug prescribed when type 2 diabetes is diagnosed.

- a. DPP-4 inhibitor
- b. SGLT2 inhibitor
- c. insulin
- d. GLP-1 agonist
- e. metformin

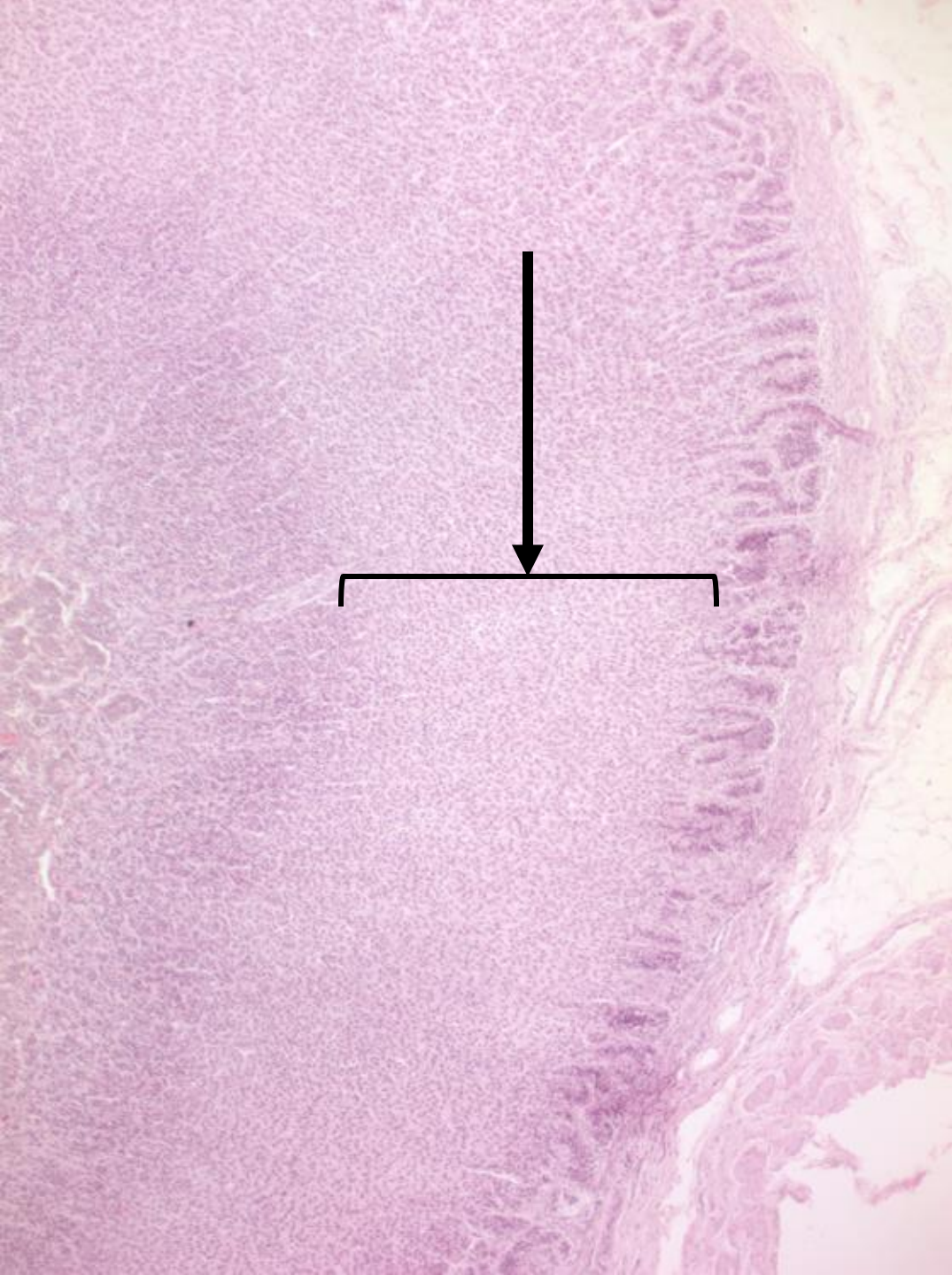
5. Name the enzyme that breaks down the incretin hormones GLP-1 and GIP. (Abbreviation OK).

DPP-4 (dipeptidyl peptidase-4)



6. Name the structure indicated by the green arrow.

pituitary gland



7. Which of the following regions is indicated by the bracket?

- a. adrenal medulla
- b. zona reticularis
- c. **zona fasciculata**
- d. zona glomerulosa



8. The woman shown in the figure above has hyperpigmentation as well as high secretion of ACTH. What disorder does she have?

- a. Graves' disease
- b. Hashimoto's thyroiditis
- c. **primary adrenal insufficiency (Addison's disease)**
- d. hypopituitary adrenal insufficiency
- e. iodine deficiency



9. Name the cell shown by the arrow.

follicle cell

10. What is the pattern of hormone secretion in Graves' disease?
- a. low T3, T4 and high TSH
 - b. low T3, T4 and low TSH
 - c. high T3, T4 and high TSH
 - d. high T3, T4 and low TSH