Supporting Information:

Berunda polypeptides: Bi-headed rapamycin carriers for subcutaneous treatment of autoimmune dry eye disease

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Supplemental Table 1. Histopathological observations in tissues of male NOD mice after 2 weeks of treatment with FAF-Rapa or other control groups. Observed and reported by a blinded, well-trained pathologist.

Groups / Organs	Vehicle	Free Rapa	Carrier (FAF only)	FAF-Rapa
Skin	Mature epidermis, hair follicles and adnexal glands. Unremarkable dermis and subcutaneous adipose	Markedly hypoplastic hair bulb and the sebaceous glands. The epidermis and dermis are otherwise unremarkable. 100% of the hair follicles affected by the process.	Mature epidermis, hair follicles and adnexal glands. Unremarkable dermis and subcutaneous adipose	Markedly hypoplastic hair bulb and the sebaceous glands. The epidermis and dermis are otherwise unremarkable. 100% of the hair follicles affected by the process.
Kidney	Sections show a well-defined cortex and medulla. Numerous glomeruli were identified. The renal medulla with loops of Henle and collecting ducts of Bellini were identified. No histopathologic abnormality was otherwise identified in the kidney.	Sections show a well-defined cortex and medulla. Numerous glomeruli were identified. The renal medulla with loops of Henle and collecting ducts of Bellini were identified. No histopathologic abnormality was otherwise identified in the kidney.	Sections show a well-defined cortex and medulla. Numerous glomeruli were identified. The renal medulla with loops of Henle and collecting ducts of Bellini were identified. No histopathologic abnormality was otherwise identified in the kidney.	Sections show a well-defined cortex and medulla. Numerous glomeruli were identified. The renal medulla with loops of Henle and collecting ducts of Bellini were identified. No histopathologic abnormality was otherwise identified in the kidney.
Liver	Sections show a uniform parenchyma with hepatocytes and sinusoids with Kupffer cells. Morphology of hepatocytes and the Portal triads is otherwise unremarkable. No steatosis or inflammation is seen.	Sections show a uniform parenchyma with hepatocytes and sinusoids with Kupffer cells. Morphology of hepatocytes and the Portal triads is otherwise unremarkable. 2 out of 5 mice show microsteatosis in a centrilobular pattern, involving up to 10% hepatocytes. No inflammation.	Sections show a uniform parenchyma with hepatocytes and sinusoids with Kupffer cells. Morphology of hepatocytes and the Portal triads is otherwise unremarkable. No steatosis or inflammation is seen.	Sections show a uniform parenchyma with hepatocytes and sinusoids with Kupffer cells. Morphology of hepatocytes and the Portal triads is otherwise unremarkable. 5 out of 5 mice show microsteatosis in a dominantly centrilobular pattern, involving 40-50% hepatocytes. No inflammation.
Lung	Sections show a normal lung parenchyma with alveolar ducts, alveolar sacs, terminal and respiratory bronchioles. Occasional alveolar macrophages were noted. Occasional procedural atelectasis is noted.	Sections show a normal lung parenchyma with alveolar ducts, alveolar sacs, terminal and respiratory bronchioles. Occasional alveolar macrophages were noted. Occasional procedural atelectasis is noted.	Sections show a normal lung parenchyma with alveolar ducts, alveolar sacs, terminal and respiratory bronchioles. Occasional alveolar macrophages were noted. Occasional procedural atelectasis is noted.	Sections show a normal lung parenchyma with alveolar ducts, alveolar sacs, terminal and respiratory bronchioles. Occasional alveolar macrophages were noted. Occasional procedural atelectasis is noted.
Spleen	Sections displayed white and red pulp of the parenchyma. Germinal centers and surrounding lymphocytes are identified in the white pulp area. Megakaryocytes, macrophages, hematopoietic cells and venous sinuses are seen in the red pulp area.	Sections displayed white and red pulp of the parenchyma. Germinal centers and surrounding lymphocytes are identified in the white pulp area. Megakaryocytes, macrophages, hematopoietic cells and venous sinuses are seen in the red pulp area.	Sections displayed white and red pulp of the parenchyma. Germinal centers and surrounding lymphocytes are identified in the white pulp area. Megakaryocytes, macrophages, hematopoietic cells and venous sinuses are seen in the red pulp area.	Sections displayed white and red pulp of the parenchyma. Germinal centers and surrounding lymphocytes are identified in the white pulp area. Megakaryocytes, macrophages, hematopoietic cells and venous sinuses are seen in the red pulp area.