








R&D program of Desentum

Allergen		Hypoallergen	Status
	Birch <i>(Betula)</i>	DM-101: Bet v 1 protein genetically modified to reduce its allergenicity (patent-protected)	DM-101 hypoallergen candidate is in clinical development. It has successfully passed a First-in-Human clinical study evaluating its safety and tolerability and gathering information about its immunogenicity. In preclinical studies, it has also shown considerably decreased histamine release in specific histamine release assays (HRA) when compared to wild-type Bet v 1, and induced desired IgE and IgG responses in animal models.
	Timothy <i>(Phleum)</i>	Phl p 1 protein genetically modified to reduce its allergenicity	We have produced several hypoallergen variants of Phl p 1 and tested them in HRA assays. We are currently selecting the hypoallergen to be produced for non-clinical studies.
	Peanut <i>(Arachis)</i>	Ara h 2 & 6 proteins genetically modified to reduce their allergenicity	Structure of Ara h 2 & 6 is being determined. Design of hypoallergens is taking place.
	Dog <i>(Canis)</i>	Can f 1, 2, 3, 4, 5 and 6 proteins genetically modified to reduce their allergenicity	We have successfully solved the 3-D structure of Can f 1, on which the design of Desentum's hypoallergen variants is based. We are producing hypoallergen candidates and performing HRA analysis.
	Horse <i>(Equus)</i>	Equ c 1 protein genetically modified to reduce its allergenicity (patent-protected)	We have produced several hypoallergen variants of Equ c 1. In HRA assays, the histamine release is reduced considerably (up to 1000-fold) compared to wild-type Equ c 1.
	Cat <i>(Felis)</i>	Fel d 1 protein genetically modified to reduce its allergenicity	Structure of Fel d 1 is being determined. Design of hypoallergen variants is taking place.
	Mugwort <i>(Artemisia)</i>	Art v 1 protein genetically modified to reduce its allergenicity.	Structure of Art v 1 is being determined. Design of hypoallergen variants is taking place.