

# Request for Proposal RFP\_2019\_0095: Drug Delivery Technology to Target Muscle

**RFP Title** Drug Delivery Technology to Target Muscle

**Due Date** Sep 13

**Opportunity**

**Timeline**

**Financials**

**RFP Description** NineSigma, representing a **major pharmaceutical company in Japan**, seeks a **drug formulation or drug delivery system (DDS) to effectively deliver any of antibodies, low molecular weight compounds or mRNA to target muscles (mainly skeletal muscles)**.

**Background**

**Key Success Criteria**

## **Delivery technology requirements**

The Client seeks a drug formulation or DDS meeting the following requirements:

- Delivered compounds (active pharmaceutical ingredients (API)): Low molecular weight compounds, proteins (including antibodies) or mRNA.
- Delivery site: Target muscle (mainly skeletal muscle)
- Administration route: Systemic administration, for example, intravenous injection, subcutaneous injection, or oral administration.

[Formulation profile]

- After systemic administration, it should be able to be delivered to the target site efficiently.

- In the case of subcutaneous injection, it can be delivered to targeted muscles widely, not just the administration site

- After delivery, it should be able to let API remain in the muscle at a high concentration.

- In the future, it should be able to let API remain in the site for one week at a concentration of two to five times more than the case of administration API alone.

- The drug should not accumulate in sites other than the target muscle or there should be no toxicity even if it does.

- Preferably, the effects of proposed formulation have been verified in vivo.

[Modification of API]

- A technology that does not modify the API is preferred.
- A technology that is applicable universally, rather than one that can only be applied to a single specific API.

- Preferably, it can be applicable to two or more drugs.

**Area of Interest**

Pharmacology > Drug Discovery, Drug Development, and Regulatory Affairs  
Health Sciences-Chemicals and Drugs > Other Chemicals and Drugs  
Health Sciences-Chemicals and Drugs > Chemicals and Drugs-General  
Pharmacy and Pharmaceutical Sciences > Pharmaceutics and Drug Design  
Health Sciences-Chemicals and Drugs > Chemicals and Drugs-General > Chemicals and Drugs-All disciplines  
Pharmacy and Pharmaceutical Sciences > Pharmaceutics and Drug Design > Pharmaceutics and Drug Design-All disciplines  
Health Sciences-Chemicals and Drugs > Other Chemicals and Drugs > Other Chemicals and Drugs-All disciplines  
Pharmacology > Drug Discovery, Drug Development, and Regulatory Affairs > Drug Discovery, Drug Development, and Regulatory Affairs- All disciplines

Manufacturing > Pharmaceuticals, medicinal chemical, botanical products > Small Molecule, Chemical Drugs

**Possible Approaches**

The Client expects technologies such as the following, but is open to others that meet the requirements stated above:

- Artificial carrier technology adding targeting function and cellular permeability to drug carrier.
- Delivery technology using external stimulation with potential of practical application in clinical settings.

**Approaches not of Interest**

The following approaches are not of interest:

- Gene delivery using viral vectors.

(However, tools with potential of delivering low molecular weight compounds or antibodies into cells or enabling them across the specific organ vasculature (vascular endothelial) will be accepted for consideration.)

**Preferred Collaboration Types**

Contract Research  
Joint Development  
Technology Licensing  
To Be Negotiated

**Items to be Submitted**

**Background**

The Client gives myopathy as one of the key areas of research and development and aims at innovative drug discovery for diseases with high unmet medical needs. If this proposed project is successful in combining the Client's candidate compounds with a formulation or DDS technology that can be delivered effectively to the target site, it can help further accelerate/promote the research and development of new drugs.

**Anticipated Project Process**

After the submission due date, the client will review all submitted proposals. NineSigma will send the review results to each proposer 6-8 weeks after the due date. The client possibly asks clarifying questions before selecting the most suitable candidates for collaboration. The client will select best candidates through evaluations. During the selection process, the client may execute non-disclosure agreement (NDA) with selected respondents, seek further information disclosure, and discuss specific development targets or potential opportunities.

The client will execute necessary agreements with the selected respondents and move to the advanced development phase. Specifics of any collaboration will be determined through consultation with the concerned parties.

**Notes on Response**

Proposal shall have clear points and should not include confidential information. Supplemental files may be submitted in addition to the proposal.



**Response evaluation**

The client will evaluate all responses with the following criteria.

- Overall scientific and technical merit
- Approach to proof of concept or performance
- Economic potential of concept
- Realism of the proposed plan (action items, timeline, roles, deliverables, cost estimation)
- Potential for proprietary position
- Respondents' capability and related experiences

**Award Amount**

**Attachments**

	Name	Creation Time	Size	Created By
	AdditionalInformationShee...	May 6 at 09:42 PM	257.58 kB	Kimihiko Tanaka
	RFP_Drug_Delivery_Target_...	Jul 25 at 02:28 AM	74.03 kB	Hiroshi Yamazaki

**Request Number**

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Picture

