NewsRelease



Nippon Shokubai and GlyTech Announce to Collaborate on R&D and Nippon Shokubai Subscribe for Shares of GlyTech through Third Party Allotment

NIPPON SHOKUBAI CO., LTD. (Headquarter: Osaka, Japan, President: Masanori Ikeda, hereinafter "Nippon Shokubai") and GlyTech, Inc. (Headquarter: Kyoto, Japan, President: Hiroaki Asai, hereinafter "GlyTech") announce that they have agreed to collaborate on research and development of Glycosylated Somatostatin Analog (hereinafter "G-SRIF"). Based on this agreement with GlyTech, Nippon Shokubai has decided to establish a laboratory of peptide API (active pharmaceutical ingredient) synthesis.

GlyTech and Nippon Shokubai announce that they have decided to subscribe for shares of GlyTech to Nippon Shokubai through a third party allotment.

1. Purpose of Collaboration

In the current long term business plan "Reborn Nippon Shokubai 2020" started in 2014, Nippon Shokubai has a plan to add a health and medical business sector as a new business area. Nippon Shokubai keeps on seeking out the chance of business partnerships in order to construct a business base. Targeting the peptide drugs and DDS field where market growth is expected, Nippon Shokubai strives to establish drug development support business to provide customers a consistent service from R&D and clinical studies to contract manufacturing.

GlyTech has platform technologies of manufacturing Human type N-glycans, modification of glycans and glycosylation, and analytical technologies for them. Through these technologies, GlyTech aims to establish drug development support business for innovative biologics and to provide low cost / high quality APIs.

GlyTech also has a business of drug discovery based on these technologies, and G-SRIF is one of the candidates which GlyTech has. GlyTech independently started confirmation of safety and preparations for clinical studies of G-SRIF aiming at licensing out in the future, in advance of other new drug candidates GlyTech has.

Nippon Shokubai and GlyTech have judged that effective mutual use of each other's resources will accelerate their business in peptide drug. Collaboration between Nippon Shokubai and GlyTech will lead to the promotion of their health and medical materials sector including G-SRIF (Figure 1).

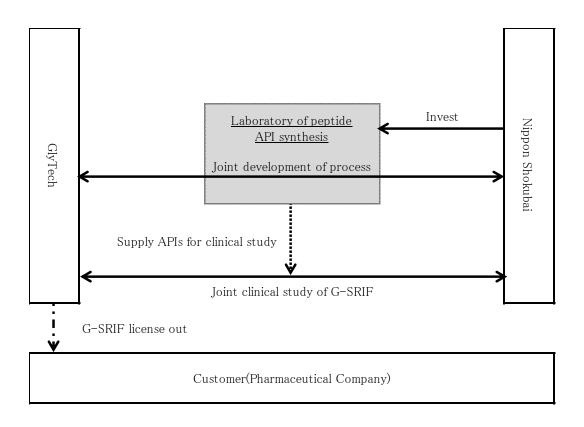


Figure 1 : Scheme of collaboration between Nippon Shokubai and GlyTech

2. Outline of Collaboration

(1) Outline of the Joint Development of G-SRIF

Somatostatin (somatotropin release-inhibiting factor, SRIF) is the growth hormone inhibitory factor in the form of 14- or 28 amino acids peptides. SRIF evoke several physiological functions through the action of five distinct SRIF receptor subtypes (sst1-5). Since native SRIF has only limited clinical applications due to their rapid degradation in plasma, the first-generation SRIF analogs such as octreotide (sandostatine®) have been developed and grown to a blockbuster drug (more than ¥150 billion annual sales in the world). However, the first generation SRIF analogs are sst2 specific ligands and difficult to treat several symptoms where sst2 is not involved. Thus, development of pharmacological active SRIF analogs that have multiple activity for all sst1-5 are eagerly anticipated.

GlyTech, Inc. synthesized glycosylated SRIF analogs (G-SRIF) by attaching a human type glycan to the SRIF molecule (Figure 2). G-SRIF showed a high affinity to all of the five receptor subtypes with an improved pharmacokinetic profile. This clearly indicates that G-SRIF could be a potent and novel therapeutic drug for SRIF related diseases and could shed light on the new indications. As the first step, GlyTech and Nippon Shokubai have jointly launched development of G-SRIF for acromegaly.

Nippon Shokubai has decided to establish laboratory of peptide API synthesis in order to manufacture G-SRIF for investigational use by developing its scale-up manufacturing process in collaboration with GlyTech. Both companies will also collaborate on pre-clinical study and phase 1 clinical study of G-SRIF in order to accelerate its clinical development. The investigational new drug application is scheduled for April 2016.

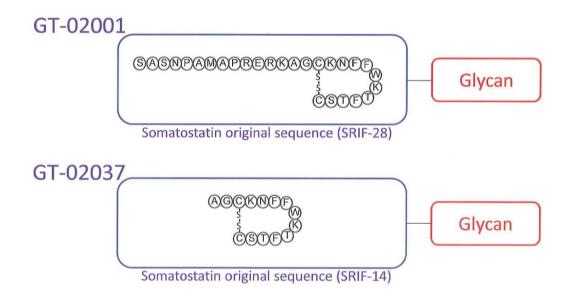


Figure 2 : Outline of G-SRIF (Glycosylated Somatostatin Analog)

Outline of Laboratory of Peptide API Synthesis

Investment:	300 million yen (estimated)
Location:	Nippon Shokubai Suita Research Center
Regulation:	GMP (JP, EU, US)
Construction start:	January, 2016
Construction complete:	September, 2016

(2) Outline of Subscription for Shares in the Third Party Allotment

Class and number of shares to be subscribed:	400,000 shares of common stock
Share-holding after subscription:	9.59%
Payment date:	October 21, 2015

- 3. Outline of Nippon Shokubai and GlyTech
- (1) Nippon Shokubai

Name	NIPPON SHOKUBAI CO., LTD.
Head office	Kogin Bldg., 4-1-1 Koraibashi, Chuo-ku, Osaka 541-0043, Japan
Representative	Masanori Ikeda, President
Activity	Research and development, manufacturing, and sales of
	petrochemicals etc.
Capital	25,038 million yen
Established	August 21, 1941
Number of shares	204,000,000 shares
outstanding	
End of fiscal year	March 31
Employees	4,075(consolidated) 2,141(non-consolidated)
	(as of March 31,2015)
Website	http://www.shokubai.co.jp/en/

(2) GlyTech

Name	GlyTech, Inc.
Head office	134, Chudoji Minamimachi KRP#1, Shimogyo-ku,
	Kyoto 600-8813, Japan
Representative	Hiroaki Asai, President
Activity	Licensing(glycosilated peptides and proteins), contract research
	and development, contract manufacturing, supplying standard
	reagents
Capital	483 million yen
Established	April 2, 2012
Number of shares	3,731,910 shares
outstanding	
End of fiscal year	December 31
Employees	21 (as of August 31, 2015)
Website	http://www.glytech.jp/en/

4. Forecast

Nippon Shokubai and GlyTech share the future vision of "Realizing Production of Biopharmaceuticals in Japan" and will develop collaboration business by using resources of each other.

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