News Release

March 31, 2015

**IBL and Astellas Conclude New Collaborative Research Agreement**

Today Immuno-Biological Laboratories Co., Ltd (hereinafter "**IBL**") announced that IBL and Astellas Pharma Inc. ("**Astellas,**" Headquarters: Chuo-ku, Tokyo, Japan; President and CEO: Yoshihiko Hatanaka) have entered into a new collaborative research agreement regarding the pharmaceutical applications of fibrinogen produced by transgenic silkworms.

**Overview and Expected Timeline of Collaborative Research**

IBL and Astellas entered into a collaborative research agreement regarding pharmaceutical applications that use the human protein produced by transgenic silkworms on December 24, 2013. We have successfully completed the fundamental review process of the characteristics of this valuable protein in preparation for moving forward with the commercialization of drugs that use the human fibrinogen produced by transgenic silkworms. Based on the aforementioned results, we entered into a new collaborative research agreement with Astellas so that we can advance to the next stage.

IBL and Astellas aim to achieve an improved level of productivity and realize a stable supply of reliable human fibrinogen produced through the use of transgenic silkworm production technology.

**Timeline for commercialization**

| Agreement | Details | Status |
|---|---|---|
| Collaborative research (Signed on December 24, 2013) | Fundamental review of the characteristics of fibrinogen | Completed (Period of review: January 1, 2014 to December 31, 2015) |
| | Review of the production method for pharmaceutical application | |
| New collaborative research | Review of the production method for large volumes of human fibrinogen | Commencement date: March 31, 2016 |
| | Test production at the pilot plant (Maebashi-shi, Gunma, JAPAN). | |

Note: A portion of the human fibrinogen research and development received funding under the outsourcing research project "Technology Development for Creating New Market by Utilizing Animal Genomes," organized by the Ministry of Agriculture, Forestry and Fisheries between 2009 and 2011.

**About Fibrinogen**

Fibrinogen is a major molecule on blood coagulation and is used for tissue adhesion, tissue closing, and the halting of bleeding in surgical operations. Because fibrinogen is difficult to be produced using by microorganisms due to its complex protein structure, fibrinogen derived from human blood is currently used for clinical practice.

**Expected Outcome**

IBL has successfully developed groundbreaking technology that can effectively produce human fibrinogen in the cocoons of transgenic silkworms. Because there is minimal risk of virus contamination of the human fibrinogen extracted from the cocoons, it makes possible to stably produce reliable supply of human fibrinogen in larger volumes.

IBL has been granted the right to receive the upfront fee and milestone based on the results of the joint research under the new collaborative research agreement with Astellas. Although we expect to receive the upfront fee in the fiscal year 2015 (by the end of March in 2016), we are currently conducting a careful examination of our consolidated and non-consolidated financial reports. We will make an announcement regarding the result of this examination as soon as it is confirmed.

Note: The amount of the upfront fee will not be publicly disclosed for business strategy purposes. It is also not clear whether we will receive the milestone because it is dependent on the results of collaborative research.