

## Press Release

### SABIC Innovative Plastics' Healthcare Resin Portfolio Enables Biorep® to Bring a Distinctive Diabetes Treatment to the Market Quickly & Efficiently

BERGEN OP ZOOM, The Netherlands – July 8, 2008 – The World Health Organization reports that close to 177 million people worldwide currently suffer from diabetes and this figure is expected to more than double by 2030. However, getting new treatments to patients can be complex and time-consuming, especially for small, specialty companies. To expedite the process, Biorep® Technologies, a device manufacturer specializing in tools used in diabetes research and treatment, turned to SABIC Innovative Plastics' healthcare resin portfolio as it developed a new system for isolating insulin-producing cells faster and more efficiently. Additionally, the firm, based in Miami, Fla. leveraged SABIC Innovative Plastics' application development assistance to optimize and mass-produce two critical components.

“SABIC Innovative Plastics is committed to helping small, innovative healthcare manufacturers bring their products to market by delivering the services, materials, and expertise that our customers need,” said Mardye Lindway, Ph.D., program manager, Healthcare, SABIC Innovative Plastics. “Through our collaboration with Biorep and the use of our high-performance materials, their groundbreaking system can now be mass-produced, making it more accessible to clinicians and patients.”

#### **Ultem\* Resin Delivers Light Weight, Translucence, and Autoclavability for the Ricordi® Chamber**

Biorep's technology enables islets – insulin-producing cells from a donor's pancreas – to be isolated and purified for transplantation in patients whose Type-1 diabetes cannot be controlled with insulin injections. The Ricordi® Chamber, invented by Dr. Camillo Ricordi of the Diabetes Research Institute in Miami, is used to break down the pancreas mechanically and chemically to isolate the islets. The Ricordi Chamber was originally custom-made from stainless steel, which was quite heavy to shake during the 30-45 minute isolation process and prevented doctors from visually assessing the progress of the breaking down of the pancreas.

By injection molding the Ricordi Chamber from Ultem HU polyetherimide (PEI) resin, a translucent, high-temperature, autoclavable material, Biorep achieved several key objectives. According to Ramon Poo, president, Biorep Technologies, “The main benefit of finding a suitable autoclavable plastic is mass production. By using Ultem resin, we can provide chambers to the doctors quickly, instead of the two weeks that it takes to produce a custom stainless steel chamber. The use of Ultem resin to mold chambers also reduces our manufacturing costs. The lower price of the chamber makes it possible for more research centers, universities, and companies to purchase and use the Ricordi Chamber.”

Ultem resin is a rigid, high-strength thermoplastic that can withstand prolonged exposure to high temperatures and repeated sterilization by autoclaving. It has a translucent, light amber color that allows the doctors to see the pancreas inside the chamber. The excellent chemical resistance of Ultem HU resin was also critical, since the enzymes used during the digestion process are extremely caustic.

### **Cyclocac\* Resin Provides Cost-effective Solution for Disposable Perfusion Tray**

A disposable perfusion tray, also part of Biorep's device offering and used in transplant procedures, is injection molded entirely out of SABIC Innovative Plastics' Cyclocac HM acrylonitrile-butadiene-styrene (ABS) resin, which offers excellent toughness, chemical resistance, and bondability. This biocompatible material was custom-colored white using SABIC Innovative Plastics' ColorXpress service.

Poo commented, "Many facilities do not have the expensive, certified, sterilization equipment and approved processes that are required when reusing items for isolations. The option to buy a disposable, sterile perfusion tray made from Cyclocac ABS resin has assisted many facilities with the approval of their isolation protocols."

### **A Strong Healthcare Product Portfolio**

SABIC Innovative Plastics adheres to stringent healthcare product requirements covering resin biocompatibility in accordance with either USP Class VI biological or the ISO 10993 "Biological Evaluation of Medical Devices" standards; food contact compliance according to European Union and FDA standards; FDA Drug Master File documentation, and formula lock and rigorous management of the change process.

For more information on SABIC Innovative Plastics' healthcare resins, please visit the company's website at [www.sabic-ip.com](http://www.sabic-ip.com).

## About SABIC Innovative Plastics

SABIC Innovative Plastics is a leading, global supplier of engineering thermoplastics with a 75-year history of breakthrough solutions that solve its customers' most pressing challenges. Today, SABIC Innovative Plastics is a multi-billion-dollar company with operations in more than 25 countries and over 10,500 employees worldwide. The company continues to lead the plastics industry with customer collaboration and continued investments in new polymer technologies, global application development, process technologies, and environmentally responsible solutions that serve diverse markets such as automotive, electronics, building & construction, transportation, and healthcare. The company's extensive product portfolio includes thermoplastic resins, coatings, specialty compounds, film, and sheet. SABIC Innovative Plastics ([www.sabic-ip.com](http://www.sabic-ip.com)) is a wholly owned subsidiary of Saudi Basic Industries Corporation (SABIC), one of the world's top five petrochemicals manufacturers.

###

\* Trademarks of SABIC Innovative Plastics IP BV.

® Biorep and Ricordi are registered trademarks of Biorep Technologies.

**Media Note:** The proper name of the company is **SABIC Innovative Plastics**, and excludes any abbreviations or variations when referring to the company. As an acronym, **SABIC** should be all caps whenever it appears in print.

**SABIC Innovative Plastics Media Contacts**

**The Americas**

Christine Hartter  
SABIC Innovative Plastics, Pittsfield, Mass.  
Tel: +1 413 822 5916  
E-Mail: [christine.hartter@sabic-ip.com](mailto:christine.hartter@sabic-ip.com)

**Europe**

Helen Vandebovenkamp  
SABIC Innovative Plastics, Bergen op Zoom,  
The Netherlands  
Tel: +31 164 292 097  
E-Mail: [helen.vandebovenkamp@sabic-ip.com](mailto:helen.vandebovenkamp@sabic-ip.com)

**Asia**

Cecilia Siu  
SABIC Innovative Plastics, Shanghai, China  
Tel: +86 213 222 4500 Ext. 216  
E-Mail: [cecilia.siu@sabic-ip.com](mailto:cecilia.siu@sabic-ip.com)

**Agency Media Contacts**

**The Americas**

Jim Allison  
AH&M Marketing Communications,  
Pittsfield, Mass.  
Tel: +1 413 448 2260, Ext. 25  
E-Mail: [jallison@ahmnc.com](mailto:jallison@ahmnc.com)

**Brazil**

Gabriela Bruschi  
Edelman Brazil, Sao Paulo, Brazil  
Tel: 55 11 3017 5300, x221  
E-Mail: [gabriela.bruschi@edelman.com](mailto:gabriela.bruschi@edelman.com)

**Europe**

Tessa Vroegop  
Marketing Solutions, Bergen op Zoom,  
The Netherlands  
Tel: +31 164 317 013  
E-Mail: [tvroegop@marketingsolutions.be](mailto:tvroegop@marketingsolutions.be)

**Japan**

Mitsu Sugino  
Tokyo PR Inc., Tokyo, Japan  
Tel: +81 332 732 731  
E-Mail: [sugino@tokyopr.co.jp](mailto:sugino@tokyopr.co.jp)

**China**

Shona Liu  
Edelman, Shanghai, China  
Tel: +86 21 6289 2929 x470  
E-Mail: [shona.liu@edelman.com](mailto:shona.liu@edelman.com)

This press release and relevant photography can be downloaded from  
[www.PressReleaseFinder.com](http://www.PressReleaseFinder.com)

Alternatively for very high resolution pictures please contact Tessa Vroegop  
([tvroegop@marketingsolutions.be](mailto:tvroegop@marketingsolutions.be) , +31 164 317 013)

## Photo Caption

SABIC Innovative Plastics' Healthcare Resin Portfolio Enables Biorep® to Bring a Distinctive Diabetes Treatment to the Market Quickly & Efficiently



**Photo: Biorep® Ricordi® Chambers Molded with SABIC Innovative Plastics' Ultem\* Resin**

Biorep® Technologies, a device manufacturer specializing in tools used in diabetes research and treatment, turned to SABIC Innovative Plastics' healthcare resin portfolio as it developed a new system for isolating insulin-producing cells faster and more efficiently. By injection molding the Ricordi® Chamber from SABIC Innovative Plastics' Ultem\* HU polyetherimide (PEI) resin, a translucent, high-temperature, autoclavable material, Biorep achieved several key objectives, including the ability to mass produce the chambers and achieve lower manufacturing costs. The lower price of the chamber makes it possible for more research centers, universities, and companies to purchase and use the Ricordi Chamber.

###

\* Trademark of SABIC Innovative Plastics IP BV.

® Biorep and Ricordi are registered trademarks of Biorep Technologies

## Photo Caption

SABIC Innovative Plastics' Healthcare Resin Portfolio Enables Biorep® to Bring a Distinctive Diabetes Treatment to the Market Quickly & Efficiently



**Photo: Biorep® Perfusion Tray Made with SABIC Innovative Plastics' Cyclocac\* Resin**

Biorep® Technologies is a device manufacturer, based in Miami, Fla., specializing in tools used in diabetes research and treatment. The company turned to SABIC Innovative Plastics' healthcare resin portfolio for use in the development of a disposable perfusion tray used in transplant procedures. The tray is injection molded entirely out of SABIC Innovative Plastics' Cyclocac\* HM acrylonitrile-butadiene-styrene (ABS) resin, which offers excellent toughness, chemical resistance, and bondability. This biocompatible material was also custom-colored white using SABIC Innovative Plastics' ColorXpress service. Because many facilities do not have the expensive, certified, sterilization equipment and approved processes that are required when reusing items for isolations, the option to buy a disposable, sterile perfusion tray made from Cyclocac ABS resin has assisted many facilities with the approval of their isolation protocols.

###

\* Trademark of SABIC Innovative Plastics IP BV.

® Biorep and Ricordi are registered trademarks of Biorep Technologies