



## PRESS RELEASE

## Adocia Announces Positive Topline Results from a Meal-Test Clinical Study of BioChaperone® Combo in People with Type 2 Diabetes

- BioChaperone® Combo demonstrated a statistically significant 18% reduction in blood glucose excursion over the first two hours after the meal compared to Humalog® Mix25™
- The number of hypoglycemic events per patient was also significantly lower with BioChaperone Combo than with Humalog® Mix25™
- BioChaperone Combo resulted in postprandial glucose control at least as good as that achieved with separate simultaneous injections of Lantus® and Humalog® with a similar number of hypoglycemic events per patient

**Lyon, France, June 6<sup>th</sup> 2017** - 6 pm CET – Adocia (Euronext Paris: FR0011184241- ADOC), the clinical biopharmaceutical company focused on diabetes treatment with innovative formulations of approved proteins, announced today positive topline results from a Phase 1b clinical trial evaluating the post-meal effects of BioChaperone® Combo in people with type 2 diabetes. BioChaperone Combo is Adocia's proprietary formulation combining long-acting insulin analog glargine (Lantus®, Sanofi) and fast-acting insulin analog lispro (Humalog®, Eli Lilly and Company). BioChaperone® technology enables this combination by solubilizing insulin glargine at neutral pH, at which it is compatible with fast-acting insulin analogs.

*"This clinical data for BioChaperone Combo demonstrates a statistically significant improvement over current premix, even in a limited number of people with type 2 diabetes, in terms of both the postprandial glucose excursion and the number of hypoglycemic events,"* said Dr. Steve Edelman, MD, Clinical Professor of Medicine at the University of California San Diego. *"This new combination of basal and prandial insulins clearly addresses limitations characteristic of the current set of premix insulin options, potentially enabling greater use in people with type 2 diabetes."*

The goal of the current study was to compare the effects of BioChaperone Combo on post-

meal glycemic control in participants with type 2 diabetes, to that of premixed insulin Humalog® Mix25™ (Eli Lilly) and that of the separate injections of Lantus (Sanofi) and Humalog (Eli Lilly), when each treatment was injected at mealtime. People with type 2 diabetes who require basal insulin treatment intensification are either using twice-daily premixed insulin, such as Humalog Mix25™, or multiple daily injections (MDI), consisting of up to three mealtime injections of a prandial insulin on top of their basal insulin. BioChaperone Combo is designed to offer a simple and efficient alternative to these two options.

In this randomized, double-blind, double-dummy, three period cross-over study, 39 subjects with type 2 diabetes received three consecutive daily individualized doses of each treatment: BioChaperone Combo, Humalog Mix25™ and the simultaneous separate injections of Lantus and Humalog. The primary objective of this study was to compare the post-meal glycemic control obtained on day 2 and day 3 with BioChaperone Combo vs. Humalog Mix25™ when administered immediately before the meal.

BioChaperone Combo resulted in a statistically significant glucose excursion reduction of 18% in the first two hours compared to Humalog Mix25™ (mean  $\Delta\text{AUC}_{\text{BG0-2h}}$ : BC Combo 107 mg.h/dL vs. Humalog Mix25™ 129 mg.h/dL;  $p < 0.001$ ). Blood glucose concentrations at 1h were also statistically significantly reduced with BioChaperone Combo compared to Humalog Mix25 (mean  $\text{BG}_{1\text{h}}$ : BC Combo 177 mg/dL vs. Humalog Mix25™ 192 mg/dL;  $p < 0.001$ ). In addition, BioChaperone Combo was associated with a statistically lower number of hypoglycemic events per subject (22 hypoglycemic events in 14 subjects with BC Combo vs. 43 events in 20 subjects with Humalog Mix25™,  $p = 0.003$ ) and a significantly higher time in target range during meal tests (blood glucose interval: 72 – 162 mg/dL, BC Combo 202 min vs. Humalog Mix25™ 183 min;  $p = 0.04$ ) than the premix formulation in these subjects with type 2 diabetes.

Compared to the separate simultaneous injections of Lantus and Humalog, BioChaperone Combo also significantly reduced blood glucose excursion in the first two hours by 10% (mean  $\Delta\text{AUC}_{\text{BG0-2h}}$ : BC Combo 107 mg.h/dL vs. separate injections 119 mg.h/dL;  $p = 0.045$ ) and blood glucose concentrations at 1h (mean  $\text{BG}_{1\text{h}}$ : BC Combo 177 mg/dL vs. separate injections 187 mg/dL;  $p = 0.02$ ). No significant difference in the number of hypoglycemic events per subject was observed between BioChaperone Combo and the separate injections (22 hypoglycemic events in 14 subjects with BC Combo vs. 28 events in 19 subjects with the separate injections,  $p = 0.2523$ ).

All treatments were similarly well-tolerated. One serious adverse event during treatment with BioChaperone Combo and one non-serious adverse event during treatment with Humalog Mix25™, both unlikely related to treatment, led to subject discontinuations. No new or unexpected safety findings were observed.

*“We are extremely pleased with these results, which strengthen the body of evidence supporting that BioChaperone Combo could be as simple as a premix, but with better glycemic control and a lower risk of hypoglycemia. To our knowledge, it is unprecedented for an insulin combination product to show a level of control and safety similar to the separate injections of basal and prandial insulins in people with type 2 diabetes.”* commented Olivier Soula, Deputy

General Manager and Director of R&D of Adocia. *“This opens a new treatment dimension for people with type 2 diabetes, offering them a truly efficient, safe and easy-to-use 2-in-1 insulin combination. The next step will be to document dose-response, which is a regulatory requirement to prepare for Phase 3.”*

## About ADOCIA

Adocia is a clinical-stage biotechnology company that specializes in the development of innovative formulations of already-approved therapeutic proteins. Adocia’s portfolio of injectable treatments for diabetes, featuring four clinical-stage products and six preclinical products, is among the largest and most differentiated of the industry.

The proprietary BioChaperone® technological platform is designed to enhance the effectiveness and/or safety of therapeutic proteins while making them easier for patients to use. Adocia customizes BioChaperone to each protein for a given application in order to address specific patient needs.

Adocia’s clinical pipeline includes four novel insulin formulations for the treatment of diabetes: two ultra-rapid formulations of insulin analogs (BioChaperone Lispro U100 and U200), a rapid-acting formulation of human insulin (HinsBet U100) and a combination of basal insulin glargine and rapid-acting insulin lispro (BioChaperone Combo). Adocia is also developing an aqueous formulation of human glucagon (BioChaperone Human Glucagon), two combinations of insulin glargine with GLP-1s (BioChaperone Glargine Dulaglutide and BioChaperone Glargine Liraglutide), two combinations of insulin lispro with synergistic prandial hormones (BioChaperone Lispro Pramlintide and BioChaperone Lispro Exenatide), and a concentrated, rapid-acting formulation of human insulin (HinsBet U500), all of which are in preclinical development.

*Adocia aims to deliver “Innovative medicine for everyone, everywhere.”*

To learn more about Adocia, please visit us at [www.adocia.com](http://www.adocia.com)



## For more information please contact:

<p><b>Adocia</b> Gérard Soula Chairman and CEO <a href="mailto:contactinvestisseurs@adocia.com">contactinvestisseurs@adocia.com</a> Ph. : +33 4 72 610 610</p>	<p><b>Adocia Press Relations Europe</b> <b>MC Services AG</b> Raimund Gabriel <a href="mailto:adocia@mc-services.eu">adocia@mc-services.eu</a> Ph. : +49 89 210 228 0</p>	<p><b>Adocia Investor Relations USA</b> <b>The Ruth Group</b> Tram Bui <a href="mailto:t.bui@theruthgroup.com">t.bui@theruthgroup.com</a> Ph.: +1 646 536 7035</p>
--	---	--

## Disclaimer

*This press release contains certain forward-looking statements concerning Adocia and its business. Such forward-looking statements are based on assumptions that Adocia considers to be reasonable. However, there can be no assurance that the estimates contained in such forward-looking statements will be verified, which estimates are subject to numerous risks including the risks set forth in the “Risk Factors” section of the Reference Document filed with the French Autorité des marchés financiers on April 11, 2017 (a copy of which is available on [www.adocia.com](http://www.adocia.com)) and to the development of economic conditions, financial markets and the markets in which Adocia operates. The forward-looking statements contained in this press release are also subject to risks not yet known to Adocia or not currently considered material by Adocia. The occurrence of all or part of such risks could cause actual results, financial conditions, performance or achievements of Adocia to be materially different from such forward-looking statements. This press release and the information contained herein do not constitute an offer to sell or the solicitation of an offer to buy Adocia shares in any jurisdiction.*