Emmecell Announces First Patient Dosed with EO2002 in US Phase 1 Study in Patients with Corneal Edema

– First in class novel magnetic cell-based therapy to address disease without surgery –

MENLO PARK, Calif., *July 21, 2021* – Emmetrope Ophthalmics LLC ("Emmecell"), a clinical-stage biotechnology company pioneering the discovery and development of cell-based therapies for the treatment of eye diseases, today announced dose administration for the first patient in a Phase 1, open-label, dose-escalation study of EO2002 for the treatment of corneal edema. EO2002, a first-in-class, non-surgical, magnetic cell-based therapy with the ability to modify disease, was developed by Emmecell through its exclusive Magnetic Cell Delivery (MCD) nanoparticle platform. EO2002 provides easier access to treatment before the disease becomes disabling and painful, and has the potential to prevent or delay the onset of more serious and invasive surgical procedures, including corneal transplantation.

Jeffrey L. Goldberg, MD, PhD, professor and chair of ophthalmology at Stanford University, and company co-founder, commented, "The initiation of this study represents a significant milestone for Emmecell, as it marks the tremendous commitment from our team to move from FDA IND acceptance to first-patient treated in under 10 months, in the back-drop of a pandemic. It also reflects the incredible enthusiasm from our investigators to help develop a non-surgical approach to what can otherwise be a disabling and painful disease currently treated with invasive surgical procedures like corneal transplantation."

EO2002 is being evaluated in a Phase 1, prospective, multi-center, open-label, dose-escalation study ("EMME-01") designed to assess the safety and tolerability of EO2002 with and without endothelial brushing (EB) or Descemet stripping (DS) in eyes with corneal edema secondary to corneal endothelial dysfunction that qualify for surgery involving full-thickness corneal transplantation or endothelial keratoplasty. Three doses will be studied in approximately 18 study participants that meet the inclusion/exclusion criteria. Safety and tolerability will be the primary focus for 26 weeks following treatment with EO2002.

About Corneal Edema

When the inner-most layer of cells in the cornea – the endothelium – decrease in number, whether from the trauma of cataract surgery or from disease or dystrophy, the cornea swells with fluid (edema), and loses its optical clarity. Patients with corneal edema suffer from vision

loss and pain. Currently, there are no non-surgical procedures approved for the treatment of advanced corneal edema; the only options for these patients are corneal transplantation surgery or endothelial keratoplasty, which are technically demanding surgical procedures with many limitations. Corneal edema is the most common indication for corneal transplantation.

Magnetic Cell Delivery: A Revolutionary Cell Therapy Platform

Regenerative medicine using cell therapies to replace or enhance damaged tissue is often limited by the ability to localize these cells to the target tissue. Once delivered, these cells then need to remain at that site to facilitate integration into the host tissue. Through its proprietary Magnetic Cell Delivery (MCD) nanoparticle platform, Emmecell solves the challenges of delivery, retention, and integration of cell therapies by leveraging magnetic nanoparticles to effectively localize and integrate cell therapies to the appropriate target tissue.

Emmecell's exclusive MCD nanoparticle platform addresses the limitations of the current surgical options for corneal edema with a safe, effective, non-surgical approach to transplant its proprietary corneal endothelial cells in the eye. With the availability of an effective and safe therapeutic option for corneal edema, patients with clinically significant but still mild disease will not need to wait until their condition progresses before being offered treatment.

About Emmecell

Emmecell is a privately held, clinical-stage biotechnology company pioneering the discovery and development of cell-based therapies for the treatment of eye diseases via its exclusive Magnetic Cell Delivery (MCD) nanoparticle platform technology. Emmecell solves the challenges of delivery, retention, and integration of cell therapies by leveraging magnetic nanoparticles to effectively localize and integrate cell therapies to the appropriate target tissue.

Emmecell has a broad intellectual property (IP) portfolio and is focusing its initial efforts on ophthalmic indications. Headquartered in Menlo Park, CA, Emmecell is also the parent company of CellMP (www.cellmp.com), which provides Good Manufacturing Practices (cGMP) manufacturing services. For more information, please visit www.emmecell.com.

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