Clene Nanomedicine Presents Talks in Boston at the 256th ACS National Meeting Demonstrating Superior Biological Catalytic Activity and Low Toxicity of Gold Nanocrystals Prepared Using a Novel Electrochemical Method

- Two invited oral presentations by Clene scientists will describe the chemical properties, IND-enabling toxicology, and Phase I human trial results of Clene Nanomedicine's lead gold nanocrystal asset, CNM-Au8, at the National ACS Meeting in Boston, August 19-23
- Clene's Phase II VISIONARY-MS trial of CNM-Au8 for the treatment of chronic optic neuropathy associated with relapsing remitting multiple sclerosis set to begin in Q3 2018

Boston, August 20, 2018 -- Clene Nanomedicine, Inc., a clinical-stage biopharmaceutical company, is developing a new class of Clean Surface Nanotherapeutic (CSN™) drugs using a proprietary electro-crystal-chemistry development platform. Today, in two oral platform presentations at the meeting of the American Chemistry Society (ACS) in Boston, lead scientists from Clene Nanomedicine, Mikhail Merzliakov and Adam Dorfman, will present results describing the analytical characteristics, bioactive catalytic activities, and pre-clinical toxicity and safety profiles of the clean-surfaced, highly faceted, gold nanocrystal suspension, CNM-Au8. The data will be presented in the 'Colloids' Session of the ACS "Nanoscience, Nanotechnology and Beyond" Meeting held Aug. 19-23, 2018.

Dr. Merzliakov will discuss the significant challenges of consistently growing catalytically active, stable nanocrystals without contamination from surface residues or other reduction-reaction by-products. Clene's patented method of growing stable gold nanocrystals in water using an electrochemical approach overcomes these challenges. Data to be presented in his talk demonstrates that nanocrystals resulting from this process exhibit oxidative and peroxidase/catalase-like activities superior to gold nanoparticles synthesized using alternative, traditional methods. Adam Dorfman will separately present the analytical characterization of the clean surface nanocrystals that enable a favorable toxicity profile of CNM-Au8 as demonstrated in six – and nine-month rodent and canine IND- Phase 2 enabling chronic toxicity studies. The clean safety and tolerability profile of CNM-Au8 that emerged from a First-in-Humans Phase I clinical trial of CNM-Au8 will also be presented.

The novel advantages of Clene's innovative gold nanocrystal growing methodology underscores the significant potential these nanocrystals hold to address unmet medical

needs. In work presented at a national multiple sclerosis meeting earlier this year (ACTRIMS 2018), Clene Nanomedicine presented preclinical data demonstrating the robust remyelinating effects of CNM-Au8 in *in vitro* and *in vivo* demyelination models of multiple sclerosis. Data was also presented demonstrating the ability of CNM-Au8's to restore motor functions and behaviors to mice treated with a demyelinating agent, cuprizone.

"With CNM-Au8, we are disrupting the old paradigms of drug discovery and delivering revolutionary new therapeutics. Discovering how to consistently grow biologically catalytically active, clean-surfaced nanocrystals from a variety of different metals, their alloys, and compounds means we can now make a portfolio of safe, cost-effective, and mechanistically novel new drugs. Based on the strength of our preclinical data, and the novel mechanism of action of CNM-Au8 in broadly restoring dysfunctional cellular bioenergetics, we are very optimistic about the therapeutic potential of CNM-Au8 in helping patients with demyelinating and other neurodegenerative disorders," said Glen Frick MD, PhD, Chief Medical Officer.

"We are looking forward to the launch of our VISIONARY-MS Phase 2 clinical trial in Multiple Sclerosis patients in the coming weeks in order to demonstrate remyelination efficacy for which no current drugs are available to treat the brain lesion sequelae of MS attacks," rejoined CEO Rob Etherington.

About Clene Nanomedicine

Clene Nanomedicine, Inc., (www.CleneNanomedicine.com), is a privately held clinical-stage biopharmaceutical company, based in Salt Lake City, UT with technical R&D and manufacturing in North East, MD. Clene was founded in December 2013.

Clene's platform technology develops catalytically active metallic nanocrystals with oral availability. The nanocrystals are created by patent-protected technology that capitalizes on techniques from plasma physics, hydro electro-crystallization, and materials science. Clene's first asset is CNM-Au8. Its second asset, CNM-G-AgZn17, is being readied to commence a Phase 1/2a anti-viral clinical study by 2019.

About CNM-Au8

CNM-Au8 is being developed for remyelination of CNS disorders. CNM-Au8 is a novel oral gold nanocrystal suspension, which has demonstrated remyelination across multiple animal models of demyelination.

Clene will commence a Phase 2 Study to treat Chronic Visual Pathway Deficits (Optic Nerve or Optic Radiation Lesions) in patients with stable Relapsing-Remitting Multiple Sclerosis

(RRMS) in 2018 to prove the remyelinating effects of CNM-Au8. RRMS is characterized as a demyelinating condition resulting in damage to the myelin sheath protective covering surrounding nerve fibers in the brain and spinal cord, with consequential loss of function. No therapy is currently approved in any global market for the remyelination of multiple sclerosis lesions.

Contact:

Clene Nanomedicine, Inc.

Info@Clene.com