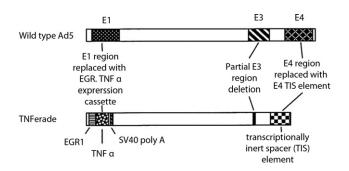
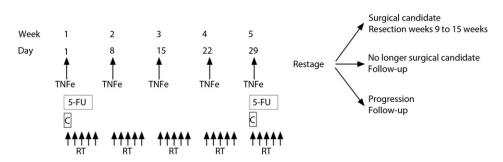
## ACKNOWLEDGMENTS

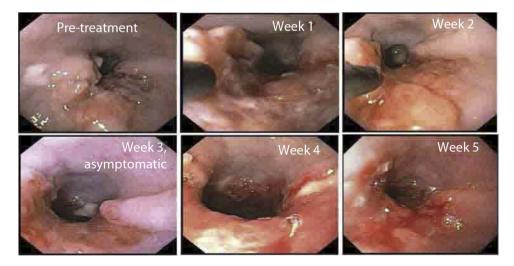
We thank the following: Randall F. Holcombe, MD, Eric H. Radany, MD, Phuong T Nguyen, MD, John G. Lee, MD, Misagh Karimi, MD, Ninh Nguyen, MD, Jeffrey Kuo, MD, Sai-hong Ignatius Ou, MD from the UC Irvine; Tonya Kaltenbach, MD, Jon Kosek, MD, Robert Rouse, MD, Shai Friedland, MD and Albert C. Koong, MD, PhD, Lynne Dempsey, RN and Sherry Wren, MD from VA Palo Alto Health Care System and Stanford University; Jaffer Ajani, MD, Ritsuko Komaki, MD, Robert Scott Bresalier, MD, Joe Y. Chang, MD, PhD, Thomas M. Guerrero, MD, PhD, Linus Ho, MD, PhD, Melenda D. Jeter, MD, MPh, Zhonxing Liao, MD, Patrick M. Lynch, JD, MD, Joe B. Putnam, Jr, MD, David Christopher Rice, MD, Jack A. Roth, MD, Craig W. Stevens, MD, PhD, William Roy Smythe, MD, Ara A. Vaporciyan, MD, Garrett Lyndon Walsh, MD, James C. Yao, MD, Alexander A Dekovich, MD, Tsung-Teh Wu, MD, PhD from MD Anderson Cancer Center; Charles Casey Cunningham, MD William J. Hyman, MD Svetislava J. Vukelja, MD Frank T. Ward, MD, Richard Seidel, MD George A. DuVall, MD Damien Mallat, MD Robert F. Hebeler, Jr., MD John Kent Hamilton, MD Blair Conner, MD, John J. Nemunaitis, MD, Donald A. Richards, MD from US Oncology; Everett Vokes, MD, Mitchell Posner, MD, Irving Waxman, MD, Daniel Haraf, MD, Angela Bradbury, MD, Ok-Kyong Chaekal, MD, Philip Connell, MD, Nancy B. Davis, MD, Gregory Friberg, MD, Mark Ferguson, MD, Harvey Golomb, MD, Melinda Gordon, MD, Stacy Gray, MD, Supriya Gupta, MD, Michael Hall, MD, Philip Hoffman, MD, Stuart Krauss, MD, Charles Rudin, MD, Peter Tothy, MD, John Villano, MD, Jerome Winegarden, MD from the University of Chicago; Bernard Boulanger, MD, Paul Kearney, MD, Richard Schwartz, MD, Andrew Bernard, MD, Stephen Barnes, MD from the University of Kentucky; Ananya Das, MD, Afshin Dowlati, MD Julie A. Clayman, MD, John Greskovich, Jr., MD, Gerard Ashton Isenberg, MD, Timothy James Kinsella, MD, Nathan Levitan, MD, Michael V. Sivak, Jr., MD, Richard C. K. Wong, MD from the University Hospitals of Cleveland/ Case University for their participation.



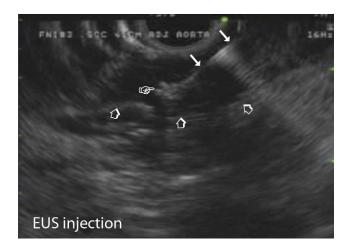
**Online Figure 1.** The structures of wild type Ad5 and TNFerade<sup>TM</sup> Biologic. TNFerade<sup>TM</sup> Biologic is an E1, E4, and partial E3-, replication deficient adenovirus type 5 vector. It includes the human TNF- $\alpha$  cDNA with a portion of Egr-1 radiation inducible promoter ligated upstream.



**Online Figure 2.** Trial schema. TNFerade<sup>TM</sup> Biologic injection via endoscopy were performed on day 1, 8, 15, 22 and 29. The starting dose of TNFerade<sup>TM</sup> was  $4 \times 10^8$  PU and dose escalation occurred in one-log increments until the MTD, or  $4 \times 10^{11}$  PU dose was reached. Chemotherapy consisted of cisplatin/5-FU regimen with cisplatin 75mg/m<sup>2</sup> on day 1 and day 29 and 5-FU 1000mg/m<sup>2</sup>/day via continuous intravenous infusion for 96 hours starting day 1 and day 29. RT was administered in 1.8 Gy daily fractions to a total dose of 45 Gy. Both 5-FU and cisplatin were initiated within 24 hours of RT on day 1 and day 29.



**Online Figure 3.** Direct injection of TNFerade<sup>TM</sup> into a previously staged T3N1 adenocarinoma of the esophagus. Complete pathologic response (not shown) was observed.



**Online Figure 4.** Example of TNFerade<sup>TM</sup> biologic under endoscopic ultrasound guidance. A 22 gauge needle (*thin arrow*) was inserted into the tumor (*thick arrows show the outer border of the tumor*). TNFerade<sup>TM</sup> biologic injectant was seen in the center of the tumor (*pointing band*).