



Small Cell Lung Cancer: Can Recent Advances in Biology and Molecular Biology Be Translated into Improved Outcomes?

Paul A. Bunn Jr., MD,^a John D. Minna, MD,^b Alexander Augustyn, PhD,^b Adi F. Gazdar, MD,^b Youcef Ouadah, BS,^c Mark A. Krasnow, MD, PhD,^c Anton Berns, PhD,^d Elisabeth Brambilla, MD,^e Natasha Rekhtman, MD, PhD,^f Pierre P. Massion, MD,^g Matthew Niederst, PhD,^h Martin Peifer, PhD,ⁱ Jun Yokota, MD,^{j,k} Ramaswamy Govindan, MD,^l John T. Poirier, PhD,^f Lauren A. Byers, MD,^m Murry W. Wynes, PhD,ⁿ David G. McFadden, MD, PhD,^b David MacPherson, PhD,^o Christine L. Hann, MD, PhD,^p Anna F. Farago, MD, PhD,^h Caroline Dive, PhD,^q Beverly A. Teicher, PhD,^r Craig D. Peacock, PhD,^s Jane E. Johnson, PhD,^b Melanie H. Cobb, PhD,^b Hans-Guido Wendel, MD,^f David Spigel, MD,^t Julien Sage, PhD,^c Ping Yang, MD, PhD,^u M. Catherine Pietanza, MD,^f Lee M. Krug, MD,^f John Heymach, MD, PhD,^m Peter Ujhazy, MD, PhD,^u Caicun Zhou, MD, PhD,^v Koichi Goto, MD,^w Afshin Dowlati, MD,^x Camilla Laulund Christensen, PhD,^y Keunchil Park, MD, PhD,^z Lawrence H. Einhorn, MD,^{aa} Martin J. Edelman, MD,^{bb} Giuseppe Giaccone, MD, PhD,^{cc} David E. Gerber, MD,^b Ravi Salgia, MD, PhD,^{dd} Taofeek Owonikoko, MD, PhD,^{ee} Shakun Malik, MD,^f Niki Karachaliou, MD,^{ff} David R. Gandara, MD,^{gg} Ben J. Slotman, MD, PhD,^{hh} Fiona Blackhall, MD, PhD,ⁱⁱ Glenwood Goss, MD, FRCPC,^{jj} Roman Thomas, MD,ⁱ Charles M. Rudin, MD, PhD,^f Fred R. Hirsch, MD, PhD^{a,*}

^aUniversity of Colorado Cancer Center, Aurora, Colorado

^bUniversity of Texas Southwestern Medical Center, Dallas, Texas

^cStanford University, Stanford, California

^dNetherlands Cancer Institute, Amsterdam, The Netherlands

^eGrenoble University Hospital Center, Grenoble, France

^fMemorial Sloan Kettering Cancer Center, New York, New York

^gVanderbilt University, Nashville, Tennessee

^hMassachusetts General Hospital, Boston, Massachusetts

ⁱUniversity of Cologne, Cologne, Germany

^jInstitute of Predictive and Personalized Medicine of Cancer, Barcelona, Spain

^kNational Cancer Center Research Institute, Tokyo, Japan

^lWashington University, St. Louis, Missouri

^mUniversity of Texas MD Anderson Cancer Center, Houston, Texas

ⁿInternational Association for the Study of Lung Cancer, Aurora, Colorado

^oFred Hutchinson Cancer Research Center, Seattle, Washington

^pJohns Hopkins School of Medicine, Baltimore, Maryland

^qCancer Research UK Manchester Institute, Manchester, United Kingdom

^rNational Cancer Institute, Bethesda, Maryland

^sCleveland Clinic, Cleveland, Ohio

^tSara Cannon Research Institute, Nashville, Tennessee

^uMayo Clinic Cancer Center, Rochester, Minnesota

^vCancer Institute of Tongji University Medical School, Shanghai, China

^wNational Cancer Center Hospital East, Chiba, Japan

^xCase Western Reserve University and University Hospitals Case Medical Center, Cleveland, Ohio

^yDana-Farber Cancer Institute, Boston, Massachusetts

^zSamsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea

^{aa}Indiana University, Indianapolis, Indiana

^{bb}University of Maryland, Greenebaum Cancer Center, Baltimore, Maryland

^{cc}Georgetown University, Washington, District of Columbia

^{dd}University of Chicago, Chicago, Illinois^{ee}Emory University, Atlanta, Georgia^{ff}Quiron Dexeus University Hospital, Barcelona, Spain^{ss}University of California Davis Comprehensive Cancer Center, Davis, California^{hh}Vrije Universiteit Medical Center, Amsterdam, NetherlandsⁱⁱUniversity Manchester, Manchester, United Kingdom^{jj}University of Ottawa, Ottawa, Canada

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Introduction

Small cell lung cancer (SCLC) is one of the four major histological types of lung cancer. The incidence of SCLC in developed countries has declined in recent years, presumably because of changes in cigarette composition.

In the United States, SCLC is estimated to represent approximately 16% of new lung cancer diagnoses, which equates to approximately 35,000 new cases annually. In underdeveloped countries the percentage of SCLC cases may be higher. SCLC presents with a very large number of genetic alterations, including alterations of tumor suppressor genes, and copy number gains and other somatic mutations in transcription factors, enzymes involved in chromatin modification, and receptor tyrosine kinases and their downstream signaling components.¹ SCLC has a high propensity for early spread and a high initial responsiveness to cytotoxic chemotherapy

*Corresponding author.

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Address for correspondence: Fred R. Hirsch, MD, PhD, University of Colorado Cancer Center, Aurora, CO, 80045. E-mail: Fred.Hirsch@ucdenver.edu

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