





U.S. Department of Health and Human Services

Research Directions in Genetically Mediated SJS/TEN



Teri Manolio, M.D., Ph.D.

Director, Division of Genomic Medicine

Joint Effort and Collaborative Funding

- Food and Drug Administration (FDA)
- National Center for Advancing Translational Sciences (NCATS)
- National Institute of Allergy and Infectious Diseases (NIAID)
- National Institute of Arthritis, Musculoskeletal and Skin Diseases (NIAMS)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- National Institute of Neurologic Disorders and Stroke (NINDS)
- National Human Genome Research Institute (NHGRI)

Research Directions in Genetically-Mediated SJS/TEN

- How did we get here?
- What are our goals?
- Where do we go from here?
- How do we get there?
- Where are the bathrooms....



National Academy of Sciences Bldg 2101 Constitution Avenue, NW Washington, D.C.

NHGRI's Genomic Medicine Meetings

Genomic Medicine Centers Meeting VI: Global Leaders in Genomic Medicine





On January 8-9, 2014, the National Human Genome Research Institute (NHGRI), sponsored its sixth Genomic Medicine Centers meeting - *Genomic Medicine Centers Meeting VI: Global Leaders in Genomic Medicine* - at the National Academy of Sciences Building in Washington, D.C. Geoffrey Ginsburg, M.D., Ph.D., Duke University, and Teri Manolio, M.D., Ph.D., NHGRI, co-chaired the meeting.

The goals of the meeting were to:

- Identify areas of active translational and implementation research, potential common strategies, and opportunities for collaborative efforts.
- Identify common barriers to implementation of genomics in healthcare and a policy agenda relevant to advances in the field.
- Identify nations with unique capabilities (such as national healthcare systems) that may allow rapid implementation and measures of key outcomes.
- Discuss opportunities (such as national healthcare system) that may allow rapid implementation and measures of key outcomes.

Genomic Medicine 6 Executive Summary

Genomic Medicine 6 Full Meeting Minutes

View meeting videos and slides from: O January 8 O January 9

You Tibe Video Playlist

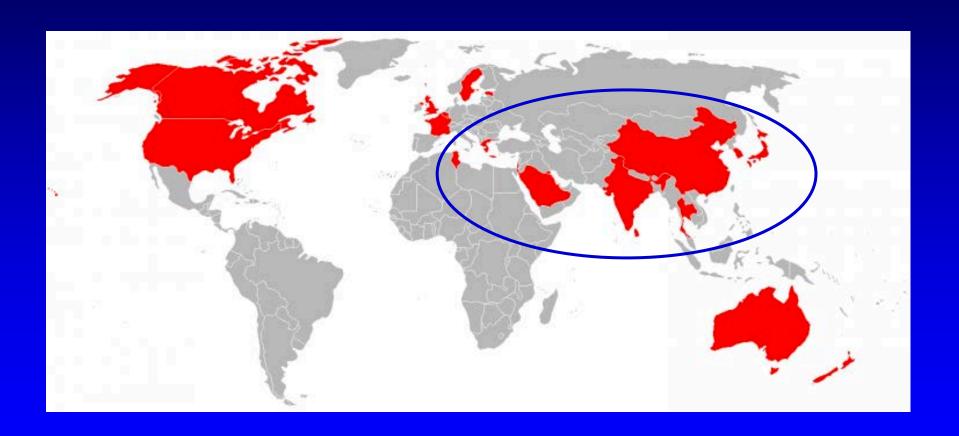
Wednesday, January 8, 2014

50 International Genomic Medicine Leaders

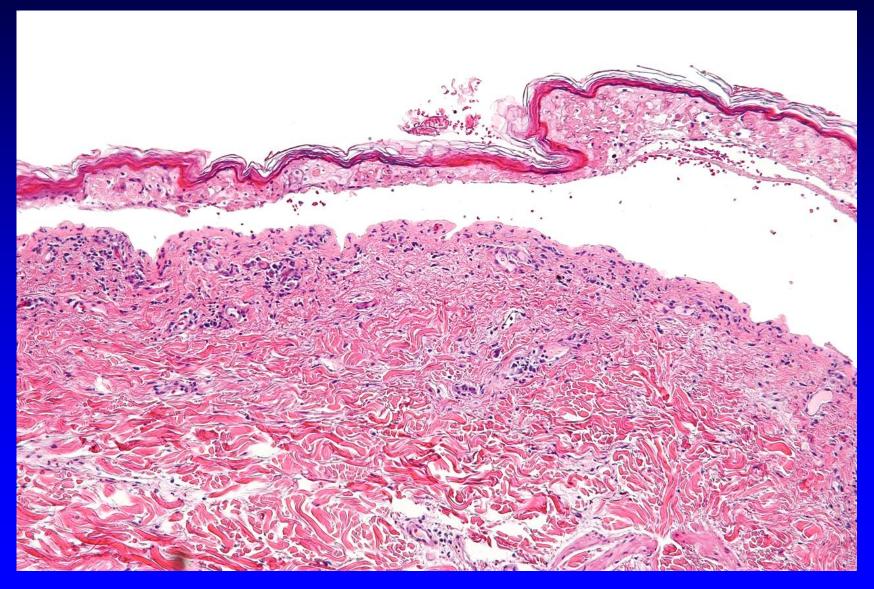


40 US Genomic Leaders and NHGRI Staff

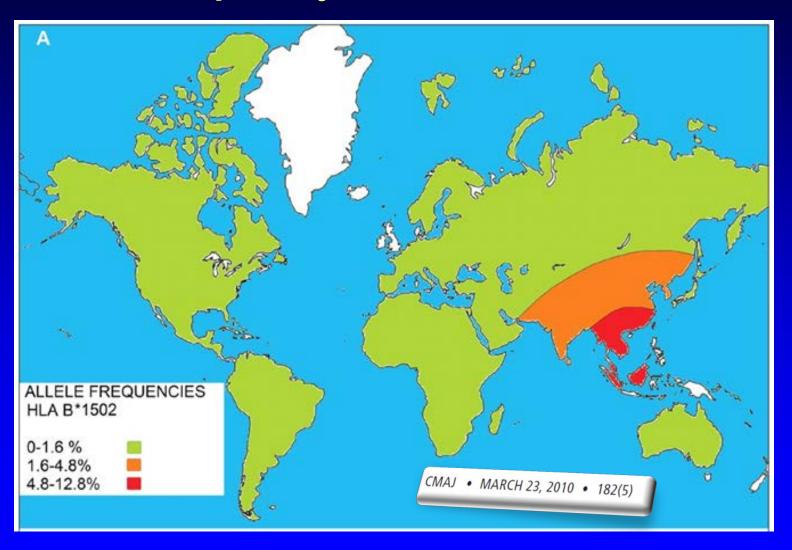
50 International Genomic Medicine Leaders 25 Countries



Stevens Johnson Syndrome/Toxic Epidermal Necrolysis



Carbamazepine and SJS/TEN: Allele Frequency of HLA-B*15:02





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Outcome of the PGX assay

8 Jan 2014

PGx Interpretation

High Risk of SJS/TEN from Carbamazepine, according to update information

ผลการตรวจ: HLA-B Gene : HLA-B*15:02/15:25

วันที่ตรวจ: 8 มกราคม 2557

การแปลผลทางเภสัชพันธุศาสตร์:

ตรงกับตัวบ่งชี้ต่อการแพ้ยา Carbamazepine ตามฐานข้อมูลในปัจจุบัน

Suggestion: According to update information, this person has HLA-B*1502 which has a high risk to develop a severe skin disorder (SJS/TEN), if he takes carbamazepine or drug structurally similar.

Need more information: please contact our PGx laboratory. Tel 02-200-4330-3...

Courtesy W Chantratita



Pharmacogenomics and Personalized Medicine Faculty of Medicine Ramathibodi Hospital

ข้อเสนอแนะ ผลการตรวจยีน HLA-B พบความสัมพันธ์กับตัวบ่งชี้ต่อการแพ้ยา ตามฐานข้อมูลในปัจจุบันคือ HLA-B*15:02 ซึ่งมีความสัมพันธ์กับการเกิดอาการแพ้ยา ทางผิวหนังชนิดรุนแรง (Stevens-Johnson syndrome และ Toxic epidermal necrolysis) ดังนั้นไม่ควรใช้ยา Carbamazepine หรือยาที่มีสูตรโครงสร้างใกล้เคียง ในผู้ป่วยรายนี้

ต้องการข้อมูลเพิ่มเติม ติดต่อ: หน่วยเภสัชพันธุศาสตร์และการรักษาเฉพาะบุคคล โทรศัพท์ 02-200-4330-3 หรือ 02-201-1380, 02-201-1390

Signature of molecular clinical pharmacist.

Workshop on Research Directions - Objectives

- 1. Review current state of knowledge of surveillance, pathogenesis, and treatment
- 2. Examine role of genomics and PGx in etiology, treatment, and eradication of preventable cases
- 3. Identify gaps, unmet needs, and priorities for future research to eliminate SJS/TEN globally

Planning Group

Mark Avigan, FDA Ricardo Cibotti, NIAMS Robert Davis, U Tenn Josh Denny, Vanderbilt Carolyn Hutter, NHGRI Lois La Grenade, FDA Neil Shear, U Toronto Lisa Wheatley, NIAID

Agenda Review

- Tuesday, March 3rd 8:30 AM 5:45 PM
 - 8:30 Session 1: State of the Science
- 11:30 Session 2: International Experience Part 1
 - Includes working lunch
 - 1:30 Session 3: Challenges in Case Finding and Surveillance
 - 4:00 Session 4: Working Groups

Working group and room assignments are in your packet

Agenda Review, Day 2

Wednesday, March 4th 8:30 AM - 3:00 PM

8:30 Session 5: International Experience Part 2

10:30 Session 6: Special Topics

Includes working lunch

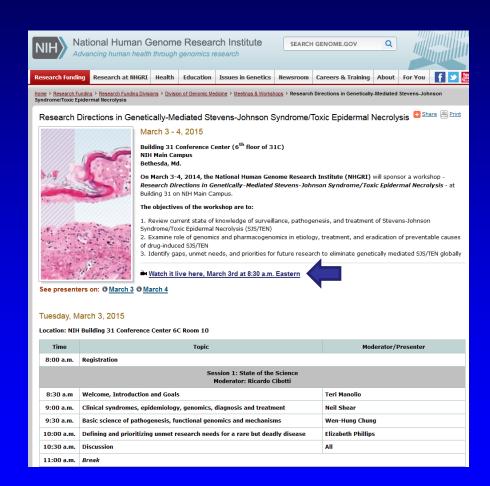
12:45 Session 7: Report of Working Groups

2:15 Session 8: Wrap-up and Next Steps

3PM Adjourn, return to hotel or to airports

Video Livestream

- The workshop is being broadcast live, and will be video archived
- A link to the video is available at: https://www.genome. gov/27560487
- Please use microphones



IN CONGRESS. JULY 4. 1776.

The unanimous Declaration of States of Merica.

- We apologize that government regulations prohibit us from paying for meals
- There is a cafeteria on the first floor
- If you ordered lunch on line, it will be delivered to the meeting room each day
- We hope you can join us for dinner tonight at Bistro Provence!
 - Sign up at registration table by end of 1st break
 - Map in your packet

Logistical Support

- Registration Desk
 - Jennifer Adona and Joshua Shapiro from Capital Consulting Corporation
 - Assistance with logistical questions
 - Assistance logging onto NIH guest network
 - Taxi arrangements
- Shuttle
 - Shuttle to hotel from B2 level at 6:00 PM
 - Shuttle will pick up at hotel at 7:15 AM

Thank You!

^{*} On both the Planning Committee and the Working Group

Objectives of GMVI: Global Leaders in Genomic Medicine

- Identify areas of active translation and implementation
- Prioritize common barriers to implementation in healthcare
- Frame a policy agenda to advance the field
- Highlight nations with unique capabilities
- Discuss opportunities for international collaborations