The Southern California Drug Metabolism Discussion Group Presents:

SCDMDG Half-Day Symposium

Tuesday October 23, 2012

Featuring Keynote Speaker

Dr. Thomas N. Tozer, Ph.D.

Professor Emeritus
Biopharmaceutical Sciences and Pharmaceutical Chemistry
University of California San Francisco

Pharmacokinetics of Protein Drugs

The presentation will address the pharmacokinetic properties of protein drugs. For purposes of this presentation, compounds containing two or more amino acids connected by peptide bonds are considered to be "proteins" and those used as drugs are divided into two groups, non-antibody and antibody. In general, there are far more non-antibody than antibody protein drugs on the market today, but antibody drugs have received the greater attention in recent years. For this discussion, a comparison of the kinetic behavior of protein drugs with that typical of small molecular weight non-protein drugs will be highlighted. Some general conclusions can be made for both non-antibody and antibody protein drugs. Protein drugs have great instability within the gastrointestinal tract, precluding – with only a rare exception, their oral administration. For large protein drugs movement through the blood capillaries is slow so that following intramuscular or subcutaneous administration the systemic circulation is reached via the lymphatics, rather than through blood capillaries. Metabolism is often quite extensive after administration by these routes during the "first-pass", resulting in low systemic availability even though these are parenteral routes. Furthermore, the speed of systemic absorption from these sites of administration is very slow, particularly for antibodies for which the peak time of the plasma concentration is often 2 to 10 days. Access to the interstitial fluids after intravenous administration is slow and therefore they often have small volumes of distribution, especially for large molecules. For many non-antibody drugs the kidneys are the major organs of metabolism. In contrast to small non-protein drugs, many protein drugs exhibit nonlinear kinetic behavior, often as a result of *target-mediated drug disposition*.

Symposium Schedule Tuesday October 23, 2012:

(for full schedule and more details please visit http://scdmdg.org)

1:10 – 1:55 pm	**Dr. Thomas N. Tozer (UCSF), "Pharmokinetics of Protein Drugs"**
2:00 – 2:30 pm	**Dr. Carolyn Decker (Vertex Pharmaceuticals)**
3:00 – 3:30 pm	**Dr. Mary Dwyer (Human BioMolecular Research Institute)**
3:30 – 4:00 pm	**Dr. Shujaun Chen (UCSD)**
4:00 – 6:30 pm	**Student Speakers, Poster Session with appetizers and refreshments**

We are also accepting abstracts for 44 poster presentations to be presented during the poster session from 4:30 to 6:30 PM. Registered attendees may submit an abstract at http://scdmdg.org/symposium-abstract.html. Two abstracts will be chosen from those received to give a 15-minute podium presentation at the symposium.

Location: Pfizer CB4
10646 Science Center Drive
La Jolla, CA 92121
Price: $20 Registration (includes appetizers and soft drinks/beer/wine)

Space is Limited— Please Register Early to Guarantee Your Attendance!
To Register for SCDMDG – October 23, 2012 send payment with this form to:
Mail: 5310 Eastgate Mall, San Diego, CA 92121
$20/person in Advance or at the Door. Please make CHECKS payable to SCDMDG.

Name(s) _____
Company _____
Address _____
Phone _____ **E-mail** _____
 # Attending _____ **Amount Enclosed** **$** _____
