

To: Elizabeth Holmes[/o=theranos organization/ou=first administrative group/cn=recipients/cn=eholmes]; Surekha Gangakhedkar[/o=theranos organization/ou=first administrative group/cn=recipients/cn=surekhag]
Cc: Daniel Young[/o=theranos organization/ou=first administrative group/cn=recipients/cn=dyoung]; Gary Frenzel[/o=theranos organization/ou=first administrative group/cn=recipients/cn=gfrenzel]; Sunny Balwani[/o=theranos organization/ou=first administrative group/cn=recipients/cn=sbalwani]
From: Ian Gibbons[/O=THERANOS ORGANIZATION/OU=FIRST ADMINISTRATIVE GROUP/CN=RECIPIENTS/CN=IGIBBONS]
Sent: Tue 10/19/2010 11:23:45 PM (UTC)
Subject: Re: GSK

I think we have demonstrated capabilities fully equivalent to lab. methods in areas where we have done assay development. Our immunoassays match the best that can be done in clinical labs and work with small blood samples. Generally our assays are faster by a factor of three to ten than kits. Our dynamic range capability is more than 10^4 fold, better than any other system. Our sensitivity is state-of-the-art (pM or pg/mL).

We have also shown abilities to work in all assay areas (cytometry, nucleic acids, general chemistry and immunoassay).

In general chemistry, we match reference methods but, importantly, we can use small blood samples.

Cost savings will accrue from small sample size and no blood draw requirement.

Acceleration of studies: Tina just put a Rubella Antibody assay on our system in three days.

We have shown HAI feasibility in less than two months.

On 10/19/10 3:52 PM, "Elizabeth Holmes" <eholmes@theranos.com> wrote:

Thanks all. I've just landed and will take a look as soon as the materials are circulated. Three points I will want to highlight and quantify as numerically as possible (by how much):

- why and how our platform will be capable of the full range of assays and be at least as good as the CRO
- why and how we'll achieve significant cost savings
- why and how we'll accelerate studies significantly

On Oct 19, 2010, at 2:51 PM, "Surekha Gangakhedkar" <surekhag@theranos.com> wrote:

Daniel,

I will send you the LAMP data in an hour.

Thanks,
Surekha

From: Daniel Young
Sent: Tuesday, October 19, 2010 2:25 PM
To: Ian Gibbons; Elizabeth Holmes
Cc: Gary Frenzel; Surekha Gangakhedkar; Sunny Balwani
Subject: RE: GSK

HOLMES0018922

We have integrated Ian's IP material into the large slide deck that we have been working on (integrated

from Hopkins and old GSK presentations).

Our efforts to update the 3.X Materials are almost done. We will be finalizing this another 2 hour or so, and then will send out this deck for review to this group.

Next on our plate are putting together the slides updating GSK assay progress:

- I will be working on HAI (I need to do some more analysis to calculate sensitivity/specificity).
- I will integrate in Tina's rubella work
- We are still waiting for LAMP data from Surekha/Gary, and then we will make the slides

We aim to send these additional GSK assay slides by 6pm tonight.

-Daniel

From: Ian Gibbons

Sent: Tuesday, October 19, 2010 2:18 PM

To: Elizabeth Holmes

Cc: Gary Frenzel; Surekha Gangakhedkar; Sunny Balwani; Daniel Young

Subject: GSK

I have put together a PPT for GSK including :

IP
HAI
Rubella Ab assay
LDL separation

The materials are the 3.x folder on the server.

Some HAI materials are hyperlinked into the main PPT because when I tried to paste them into my PPT, the formatting went wrong. Gary and Surekha have been able to access the materials and to fix some problems.

Daniel has the IP files describing Image analysis and centrifugation which I think are in presentable form. The general chemistry data and presentation materials are also in the 3.x folder under Presentations (please use the most recent). Note that we used the term LAMP in that PPT and this reference should be removed.

Daniel also has images and some analysis of Kwesi's urinalysis work (it's not yet clear that we can get a presentable calibration, but there is a dose-response for some 10 analytes: very good news).

I am having some difficulty saving files on the server because:

The files are very large and my internet connection through Comcast may be unreliable. Ian and Nathan have been very helpful.

Please recognize the remarkable work Tina did in cranking out a Rubella antibody assay in a very short time. She went the extra mile for the company and then some.

I will be available by 'phone as needed tomorrow and Thursday. Paul has a heads-up that you may want him to participate if technical matters on the HAI assay need to be addressed.