Message

From: Christian Holmes [/O=THERANOS ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHRISTIAN HOLMES]

Sent: 11/15/2014 3:17:43 AM

To: Elizabeth Holmes [eholmes@theranos.com]; Sunny Balwani [sbalwani@theranos.com]

Subject: Re: Escalated call - 111240

His response to this was to do a vacutainer redraw & I ended the conversation at that point

Sent from my iPhone

On Nov 14, 2014, at 7:15 PM, "Christian Holmes" <cholmes@theranos.com> wrote:

Just pulled over to send. Let me know if I can do anything more here. Thanks

Sent from my iPhone

Begin forwarded message:

From: Christian Holmes <<u>cholmes@theranos.com</u>>
Date: November 14, 2014 at 1:55:00 PM PST

To: Adam Rosendorff <arosendorff@theranos.com>, Daniel Young

<dyoung@theranos.com>

Subject: RE: Escalated call - 111240

OK Adam.

Now let's get to solving this issue please. By interpretation I simply mean the doc is looking for support on using the results, and I'm looking to you both to guide that process. If there's any indication of how to handle that, please let me know. Thank you

From: Adam Rosendorff

Sent: Friday, November 14, 2014 1:49 PM

To: Christian Holmes; Daniel Young Subject: RE: Escalated call - 111240

Christian

To clarify

- (1) <!--[if !supportLists]--><!--[endif]-->This is not a question of interpreting results-this is a question of the reliability and accuracy of the result.
- (2) <!--[if !supportLists]--><!--[endif]-->The most constructive thing at this point is to offer reliable and robust assays, not to spin.
- (3) <!--[if !supportLists]--><!--[endif]-->Further 100% honesty and transparency to the patient is essential.
- (4) <!--[if !supportLists]--><!--[endif]-->My first duty is not to Theranos, but to the patient as per my Hippocratic oath "primum non nocere."
- (5) <!--[if !supportLists]--><!--[endif]-->! never said ! wouldn't talk to the MD.

Thanks-

Adam

From: Adam Rosendorff

Sent: Friday, November 14, 2014 1:42 PM **To:** Christian Holmes; Daniel Young **Subject:** RE: Escalated call - 111240

I will happily speak to the clinician but I will not defend the results. I think this is what you are looking for no?

From: Christian Holmes

Sent: Friday, November 14, 2014 1:41 PM **To:** Adam Rosendorff; Daniel Young **Subject:** RE: Escalated call - 111240

This can be handled constructively internally.

Adam, if you're going to refuse to speak with a clinician who is asking to speak with our lab director about interpreting a patient's results, then so be it, but simply passing on getting back to this doc is not an option. I've included Daniel, who provided the input I relayed to you, so we can figure out together the best way to respond here.

Daniel, Adam's feedback is pasted below, as the previous messages aren't captured on this chain.

Again, please handle this constructively especially as we deal with internal teams. Thank you

From Adam:

- <!--[if !supportLists]--><!--[endif]-->The Friedewald equation is used to estimate total cholesterol using the sum of HDL, LDL and Trigs/5. The difference is more than 4%, so the assertion below is false. I cannot vouch for this test on this occasion, for the reasons that we are receiving a number of queries/complaints.
- <!--[if !supportLists]--><!--[endif]-->The triglycerides in this case are 133, so the estimated total cholesterol would be:

150+80+133/5= 256.6

The measured cholesterol is 221.

(256.6-221)/221 is around 16%

I suggest the person who sent the email read the textbooks because it doesn't sound like they know what they are talking about.

Further, all modern labs directly measure HDL and LDL.

From: Adam Rosendorff

Sent: Friday, November 14, 2014 1:09 PM

To: Christian Holmes

Cc: Megan Matsumoto; Elena Scheer **Subject:** RE: Escalated call - 111240

If you're asking me to defend these values then the answer is no

From: Christian Holmes

Sent: Friday, November 14, 2014 1:01 PM

To: Adam Rosendorff

Cc: Megan Matsumoto; Elena Scheer **Subject:** Re: Escalated call - 111240

can you please clarify what you mean by this?

Sent from my iPhone

On Nov 14, 2014, at 12:56 PM, "Adam Rosendorff" <arosendorff@theranos.com> wrote:

I'm going to pass on this one.

Adam

From: Christian Holmes

Sent: Friday, November 14, 2014 12:54 PM **To:** Adam Rosendorff; Megan Matsumoto

Cc: Elena Scheer

Subject: RE: Escalated call - 111240

I escalated this and received the following response. Adam is this sufficient for you to relay to the doc?:

The cholesterol CLIA requirement is plus or minus 10%. The difference between HDL+LDL and the cholesterol measurement is 4%. So this alone should not be a major concern from this standpoint. Note that our LDL measurement is a direct measurement. Not sure if the doctor may be comparing us to a calculated LDL measurement.

From: Adam Rosendorff

Sent: Friday, November 14, 2014 12:51 PM

To: Megan Matsumoto

Cc: Christian Holmes; Elena Scheer **Subject:** RE: Escalated call - 111240

Seems like a technical problem. There are no patient factors that would explain this.

Adam

From: Megan Matsumoto

Sent: Friday, November 14, 2014 12:45 PM

To: Adam Rosendorff

Cc: Christian Holmes; Elena Scheer **Subject:** RE: Escalated call - 111240

Hi Adam,

Elena also got a call from the patient, HDL not adding up.

, about the LDL and

Should we forward to this someone in the lab?

Thanks, Megan

From: Adam Rosendorff

Sent: Thursday, November 13, 2014 3:22 PM

To: Megan Matsumoto **Cc:** Christian Holmes

Subject: RE: Escalated call - 111240

Oh- can we please request a technical review on this one?

Thanks-

From: Adam Rosendorff

Sent: Thursday, November 13, 2014 3:08 PM

To: Megan Matsumoto **Cc:** Christian Holmes

Subject: RE: Escalated call - 111240

Called and left a message with Eva, saying TNOS would attempt to rerun this sample, and if this were not possible, we would do a redraw free of charge.

The problem here is the sum of the LDL (150 mg/dL) and the HDL (80mg/dL), is 230 mg/dL, which is greater than the total cholesterol measurement (221mg/dL). So one or more of these measurements must be incorrect. There are no patient factors that can explain this.

Thanks,

Adam

From: Megan Matsumoto

Sent: Thursday, November 13, 2014 3:00 PM

To: Adam Rosendorff

Subject: FW: Escalated call - 111240

Hi Adam,

HDL and LDL result concerns for patient attached.

. The report is

FOIA Confidential Treatment Requested by Theranos

Thanks, Megan

From: Christian Holmes

Sent: Thursday, November 13, 2014 2:21 PM

To: Megan Matsumoto

Subject: RE: Escalated call - 111240

Yes, this one is in Adam's wheelhouse. Thanks

From: Megan Matsumoto

Sent: Thursday, November 13, 2014 2:19 PM

To: Christian Holmes

Subject: Escalated call - 111240

Hi Christian,

Eva the MA for Dr. Jason Collier at Southeast Valley Medical Group are concerned about the HDL and LDL results in the lipid panel for pt.

. She said that the HDL and LDL are not adding up and think that the LDL is a false reading.

Caller: Eva (Medical Assistant)
Patient: . . .

Visit date: 10/24

Call back #: 480-969-1446 x 2335

Should I forward this to Adam?

Thanks, Megan