AABB Statement to the Food and Drug Administration's Blood Products Advisory Committee

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Strategies for Implementation of Testing for *Babesia microti* in Blood Donors

Presented by
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Thank you for the opportunity to provide these comments today. As early as 1989 AABB initiated a recommendation for indefinite deferral of blood donors who provided a history of babesiosis and followed that in 1991 with a standard in the 14th edition of the Standards for Blood Banks and Transfusion Services that remains in effect today. The current AABB Donor History Questionnaire contains the related question, (Have you ever had babesiosis?) but limited data available to date indicate this question is only marginally effective at preventing cases of transfusion-transmitted *Babesia* (TTB). [Tonnetti et al., Transfusion-transmitted *Babesia microti* identified through hemovigilance. Transfusion 2009;49:2557-63.] In 2008 the AABB Board of Directors established the TTD *Babesia* Work Group to provide leadership with the goal of analyzing risks to the US blood supply for TTB and developing scenarios to mitigate the risk.

In 2010 AABB presented a statement to this Committee in support of the concept of regional testing of blood donors for *B. microti*. At that time we acknowledged the difficulty in determining which geographic areas have sufficient risk to warrant testing but recommended that a regionalized testing approach should be defined by highly endemic areas identified through sound scientific studies of donor prevalence or locally acquired incident infections from donors or in recipients.

In the intervening years several IND studies evaluating *B. microti* screening tests in the blood donor setting have concluded and we understand that the study sponsors have or will soon submit their product(s) to the FDA for licensure.

<u>Defining Regional</u>

AABB has identified that the regions to be included as high-risk, are <u>presently</u>, the entire states of CT, MA, RI, NY, NJ, NH, ME, WI and MN.

- The selection of 7 states (CT, MA, RI, NY, NJ, WI and MN) is based upon a well-accepted consensus among public health experts for the relatively high incidence of human babesiosis cases by vector transmission (95% of cases reported nationally to the CDC in 2013, the last reporting year), as well as documentation of TTB in the extensive published CDC case series of Herwaldt et al. [Transfusion-associated babesiosis in the United States: a description of cases. Ann Intern Med. 18 Oct 2011; 155(8):509-519.] TTB cases by state, based on the implicated donor's state of residence, were reviewed by the AABB TTD *Babesia* Work Group. After review AABB recommends inclusion of two additional states (NH, ME) due to the high incidence of TTB in those states in recent years.
- The inclusion of 9 states should be subject to change as additional data become available. The AABB TTD *Babesia* Work Group will continue to survey for the occurrence and frequency of TTB in other states, particularly in states bordering those identified above, and will remain vigilant to increases in vector-borne illness in a new area in the absence of reported TTB cases.

AABB Recommendations

Since 1989 AABB has encouraged the use of available methods to mitigate risk of transfusion-transmitted babesiosis. In the past year AABB has extensively reviewed the potential for TTB using a risk-based decision making framework and utilizing data that has been carefully investigated for relevance to the policy being discussed today. With the availability of licensed screening tests for *B. microti* in blood donors AABB recommends the following with regard to strategies for implementation of testing for *B. microti* in blood donors:

1. Year round regional testing of all donations of transfusable red cell products – specifically in the 9 states described above, with inclusion of additional states based on scientific data, or exclusion of specific areas within a state as described below. (Other Considerations, #3)
2. FDA should move expeditiously to review submissions of test applications for use with screening blood donors for *Babesia*.
3. As the agency develops current thinking around the use of *B. microti* testing it should consider the use of testing system(s) that have high positive predictive values/low rates of false positivity to conserve blood availability, and low rates of false negativity leading to optimal safety.
4. AABB encourages the development and approval of a supplemental test and/or reentry algorithms to allow for donor re-entry as expeditiously as possible. It is important that the number of donors who are not infected with *B. microti*, yet who are deferred due to false positive reactions, remains low.

Other Considerations

1. In consideration of the impact of the implementation of the testing described above on blood centers and hospitals, specifically in the context of limited healthcare resources, AABB believes that extensive advocacy efforts are required to ensure that *Babesia* testing can be accomplished without disruptions to the availability of blood and components in the affected states.
2. AABB will develop, in coalition with other like-minded organizations, an advocacy plan with the goal of pursuing broad-based support that ultimately will allow for balanced approaches toward appropriate reimbursement policies, with an immediate goal to identify and secure cost recovery funding for implementing regional testing recommendations. Likewise, AABB encourages the FDA through its participation on the Advisory Committee on Blood and Tissue Safety and Availability, and other Department of Health and Human Services committees, to recognize the financial impact of additional testing and support appropriate reimbursement policies.
3. Because the incidence of babesiosis may differ within a state the omission of testing within parts of a state should only be based upon the accumulation of donor screening data demonstrating the absence of significant risk in those areas. Such data should be reviewed with public health officials for consensus prior to eliminating any given state areas.
4. AABB acknowledges that regional testing will not completely mitigate risks for transfusion-transmitted babesiosis. Based on the data and presentations we have heard at today's meeting, and as described in the FDA's Issue Summary, screening of blood donors for *B. microti* is a definite step forward in efforts to mitigate TTB.
5. AABB encourages the HHS to work with all agencies in the public health arena to mitigate babesiosis at its source.
6. AABB does not support use of this CMS database as an appropriate set of data upon which to base policy for screening blood donors for *B. microti* for the reasons noted in the Issue Summary Appendix:

    - the diagnostic codes do not necessarily represent incident codes
    - the unavailability of information to confirm potential TTB cases
    - the lack of clinical information to identify *Babesia* species