

# Bristol-Myers Squibb Pharmaceutical Research Institute

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May 31, 2002

**Dockets Management Branch  
Food and Drug Administration, HFA-305  
5630 Fishers Lane, Room 1060  
Rockville, MD 20852**

**Re: Docket No. 00D-1542: Draft Guidance for Industry on 21 CFR Part 11; Electronic Records; Electronic Signatures, Time Stamps [67 Federal Register 12999 (March 20, 2002)]**

Dear Sir or Madam:

Bristol-Myers Squibb is a diversified worldwide health and personal care company with principal businesses in pharmaceuticals, consumer medicines, nutritionals and medical devices. We are a leader in the research and development of innovative therapies for cardiovascular, metabolic and infectious diseases, neurological disorders, and oncology. In 2001 alone, Bristol-Myers Squibb dedicated more than \$2.1 billion for pharmaceutical research and development activities. The company has more than 6,000 scientists and doctors committed to discover and develop best in class therapeutic and preventive agents that extend and enhance human life. Our current pipeline comprises more than 50 compounds under active development.

For these reasons, we are very interested in and well qualified to comment on this FDA draft guidance on Electronic Records; Electronic Signatures, Time Stamps.

We commend the U.S. FDA for taking a leadership role in developing standards for the acceptance of electronic records and signatures. The use of electronic records and signatures can be beneficial to both industry and the FDA. In general, we find this guidance to be reasonable, providing some practical and achievable solutions for time stamps. The guidance also reaffirms the importance of training and awareness programs and the benefits of good documentation. We agree with the change in FDA position with respect to time zone and appreciate the agency's willingness to reconsider this issue. We do, however, have a few recommendations regarding the draft time stamps guidance and these are listed below.

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## 5.1.1 Synchronization

The example provided emphasizes the automatic synchronization of networked computer clocks with that of a designated network computer. Emphasis on defining the company's reference clock and then assuring that all clocks utilize this time may be more beneficial.



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Recommendation: FDA should consider rewording the example provided to suggest that computers on a network should align with a common methodology for reasonable and practical clock synchronization.

The use of the word “should” when discussing the “master clock” may be too prescriptive and establish an expectation that may be difficult to implement, especially in off-shore locations.

Recommendation: FDA should consider rewording the statement regarding “master clock” to read, “ It is recommended that the network “master clock” or time server be synchronized to a recognized standard computer clock.”

Requiring synchronization to a recognized standard computer clock and periodically verifying it may be too prescriptive and unnecessarily burdensome and impractical. This is especially true in the case of “stand-alone” computers.

Recommendation: FDA should consider rewording this section to indicate that computers not connected to a network should have adequate procedural controls in place so that clocks are set and maintained in a manner that assures the accuracy required for the associated application.

## **5.2 Systems Clock Security**

The statement that “You should be able to detect inappropriate changes to computer clocks” may not always be possible and is an unnecessary statement for systems with appropriate security.

Recommendation: Delete the first sentence of this section.

The suggestion that systems security personnel should periodically conduct unannounced checks of computer clocks is too restrictive. Checks should be required only of clocks that do not synchronize with a network clock. The guidance should not specify that systems security personnel conduct the checks but rather leave it to the organization to determine the most qualified personnel.

Recommendation: Unannounced checks of computer clocks should be conducted periodically to detect and deter unauthorized clock changes in systems, which are not automatically synchronized to a standard clock. Organizations should identify the most qualified personnel to conduct these checks.

## **5.3 Time Zones**

Including the time zone reference as part of the time stamp appears to go beyond the requirements of the Part 11 rule and may add an unnecessary burden on the industry since this functionality is not available in most current systems. Procedural controls or system documentation to establish this information should provide adequate integrity for the time stamp.

Recommendation: FDA should consider rewording this section to indicate that time stamps should be implemented in a consistent manner within a system. Where possible time zone reference should be part of the time stamp.

#### 5.4 Expression of Date and Time

The guidance appears to suggest that consistent implementation across an organization and all systems is expected. This portion of the guidance should be clarified to allow for the implementation of more than one date and time expression in an organization.

Recommendation: FDA should consider the additional wording to clarify this point, e.g., “This is not intended to suggest that every system will implement date and time expressions in the same manner, but rather that date and time expressions be clearly defined and implemented based on the particular need of the subject system.”

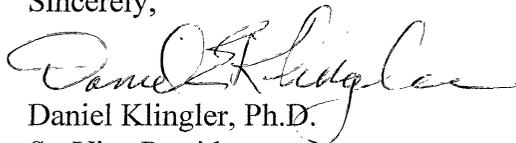
#### 5.5 Precision of Date and Time Expressions

While hour and minute may represent a general expectation, it should be recognized that more or less precision may be appropriate depending on the nature of the application.

Recommendation: Precision of audit trail and signature time stamps should be consistent with specific application requirements. In general, however, accuracy to the hour and minute are appropriate.

BMS appreciates the opportunity to provide comment and respectfully requests that FDA give consideration to our recommendations. We would be pleased to provide additional pertinent information as may be requested.

Sincerely,



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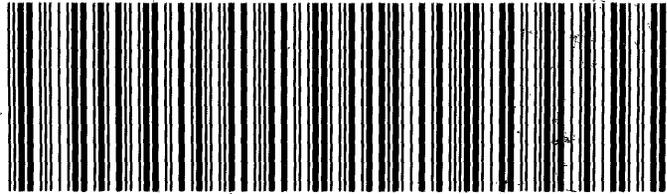
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