



# TEST REPORT IEC 60601-1-6

### Medical electrical equipment - Part 1-6:

## General requirements for basic safety and essential performance - Collateral standard: Usability

Report Number.....: 220201765SHA-002

Date of issue.....: 2023-03-17

Total number of pages .....: 15

Name of Testing Laboratory Intertek Testing Services Shanghai preparing the Report .....:

Applicant's name ...... GlobTek, Inc.

Test specification:

**Standard** ...... IEC 60601-1-6:2010, AMD1:2013, AMD2:2020 for use in

conjunction with IEC 62366-1:2015, AMD1:2020, IEC 60601-

1:2005. AMD1:2012. AMD2:2020

Test procedure .....: CB Scheme

Non-standard test method .....: N/A

TRF template used.....: IECEE OD-2020-F1:2020, Ed.1.3

Test Report Form No. .....: IEC60601\_1\_6K

Test Report Form(s) Originator ....: TÜV Rheinland of North America

Master TRF .....: Dated 2020-11-23

Copyright © 2020 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved IECEE Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

#### General disclaimer:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing NCB. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Page 2 of 15

Report No. 220201765SHA-002

Test item description:	Medica	al Power Supply		
Trade Mark(s)::	<b>G</b> GIo	bTek, Inc.		
Manufacturer:	Same	as applicant		
Model/Type reference:		1200P**** , GT*96900P*	·	
Patings	,	EC 60601-1 Test Report. 1200P**** and GT*96900	,	
Ratings:		1200P and G1 90900 100-240V∼, 50-60Hz, 1.5		
		ut: 15-54 Vdc, max.120W or 90W or 111W		
	GT*41	1133-****,		
		100-240V~, 50-60Hz or 5	50-400Hz, 1.5A;	
	Output	: 12-48Vdc, max. 90W		
Responsible Testing Laboratory (as a	nnlical	ole) testing procedure :	and testing location(s):	
☐ CB Testing Laboratory:	ррпоак			
		Intertal Testing Comice	- Changhai	
Testing location/ address		Intertek Testing Service	s Shanghai nzhou Road (North), 200233	
		Shanghai, China	1121104 11044 (110141), 200200	
Tested by (name, function, signature)	:	Nike Yuan(Engineer)	Nike Yuan	
Approved by (name, function, signatu	ıre):	Larry Zhong(Reviewer)	Lany Zhang	
☐ Testing procedure: CTF Stage 1:				
Testing location/ address				
Tested by (name, function, signature)				
Approved by (name, function, signatu				
Testing procedure: CTF Stage 2				
Testing location/ address	:			
Tested by (name + signature)				
Witnessed by (name, function, signat	ure) .:			
Approved by (name, function, signatu	ıre):			
☐ Testing procedure: CTF Stage 3	<u> </u>			
☐ Testing procedure: CTF Stage 4	:			
Testing location/ address	:			
Tested by (name, function, signature)	:			
Witnessed by (name, function, signat	ure) .:			
Approved by (name, function, signatu	ıre):			
Supervised by (name, function, signa	ture) :			

List of Attachments (including a total number of pages in each attachment):  ANNEX I – IEC 62366-1:2015, AMD1:2020 – Usability engineering process checklist			
See IEC 60601-1 Test Report 220201765SHA-001			
Summary of testing:			
Tests performed (name of test and test	Testing location:		
clause):	Intertek Testing Services Shanghai		
Process standard only, no testing	Building No. 86, 1198 Qinzhou Road (North), 200233 Shanghai, China		
Trocess standard only, no testing	200200 Ondrighal, Onina		
Summary of compliance with National Differences (List of countries addressed):  None  ☐ The product fulfils the requirements of IEC 60601-1-6:2010/AMD2:2020			
Statement concerning the uncertainty of the measurement systems used for the tests			
☐ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:			
Procedure number, issue date and title:			
GMS-QC-12 Estimation of Measurement Uncertainty, 19-April-2018 Initial Release.			
Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.			
Statement not required by the standard used for type testing			

Copy of marking plate:  The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.
See IEC 60601-1 Test Report 220201765SHA-001

Test item particulars	See IEC 60601-1 Test Report 220201765SHA-001		
Classification of installation and use	Portable for power adapter model.		
	Final determination in end product.		
Supply Connection	Appliance coupler for power adapter model.		
	Final determination in end product.		
:			
Possible test case verdicts:			
- test case does not apply to the test object:	N/A		
- test object does meet the requirement:	P (Pass)		
- test object does not meet the requirement:	F (Fail)		
Testing:			
Date of receipt of test item:	N/A		
Date (s) of performance of tests:	N/A		
General remarks:			
"(See Enclosure #)" refers to additional information ap "(See appended table)" refers to a table appended to the			
Throughout this report a comma / point is used as the decimal separator. This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.			
Manufacturer's Declaration per sub-clause 4.2.5 of	IECEE 02:		
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	<ul><li>Yes</li><li>☐ Not applicable</li></ul>		
When differences exists they shall be identified in t	he Conord and dust information andian		
When differences exist; they shall be identified in t			
Name and address of factory (ies):	See IEC 60601-1 Test Report 220201/65SHA-001		

General product information and other remarks:	
See IEC 60601-1 Test Report 220201765SHA-001	

## Page 7 of 15

Report No. 220201765SHA-002

	IEC 60601-1-6:2010, AMD1:2013, A	AMD2:2020	
Clause	Requirement + Test	Result - Remark	Verdict

4.0	GENERAL REQUIREMENTS		
4.2	USABILITY ENGINEERING PROCESS complies with IEC 62366-1 including amended definitions.	See attached IEC 62366-1 ANNEX I	Р
	Excludes production and post-production monitoring, and maintenance of the USABILITY ENGINEERING PROCESS		
	Inspection of the USABILITY ENGINEERING FILE verified	that the MANUFACTURER	Р
	- established a USABILITY ENGINEERING PROCESS	See QF-GT-DJD-7.3.2-16 Usability Engineering File P2/1.2	Р
	- established acceptance criteria for USABILITY; and	See QF-GT-DJD-7.3.2-16 Usability Engineering File P5/1.15	Р
	demonstrated that the acceptance criteria for USABILITY have been met.	See QF-GT-DJD-7.3.2-16 Usability Engineering File P5/1.15	Р

5	ME EQUIPMENT ACCOMPANYING DOCUMENTS		Р
	The instructions for use shall contain a summary of the USE SPECIFICATION as specified in IEC 62366-1:2015, AMD1:2020, Clause 5.1	Refer to "POWER SUPPLY INFORMATION" and "ELECTRICAL SPECIFICATIONS" of SPEC	Р
	The same information is also included in the technical description, if this is provided as a separate document from instructions for use		Р

4	PRINCIPLES		Р
4.1.1	The MANUFACTURER has established, documented and maintains a USABILITY ENGINEERING PROCESS addressing USER interactions with the MEDICAL DEVICE according to the ACCOMPANYING DOCUMENT	QF-GT-DJD-7.3.2-16 Usability Engineering File	Р
4.1.2	The USABILITY ENGINEERING PROCESS complies with this standard and the acceptance criteria in the USABILITY VALIDATION plan have been met	QF-GT-DJD-7.3.2-16 Usability Engineering File	Р
4.1.3	Information for SAFETY used as a RISK CONTROL measure has been evaluated according to the USABILITY ENGINEERING PROCESS	QF-GT-DJD-7.3.2-16 Usability Engineering File Page 5 section1.15	Р
4.2	The results of the USABILITY ENGINEERING PROCESS are recorded in the USABILITY ENGINEERING FILE	QF-GT-DJD-7.3.2-16 Usability Engineering File	Р
4.3	The USABILITY ENGINEERING PROCESS is scaled-up or scaled-down based on the significance of the modification as determined by the results of the RISK ANALYSIS	Document Reference No. in usability engineering file: QF-GT-DJD-7.3.2-16 Usability Engineering File Page 8, section 6	Р

5	USABILITY ENGINEERING PROCESS		Р
5.1	The MANUFACTURER shall prepare a USE SPECIFCATION. The USE SPECIFICATION shall include the following	Document Reference No. in usability engineering file: QF-GT-DJD-7.3.2-16 Usability Engineering File	Р
	- intended medical indication	QF-GT-DJD-7.3.2-16 Usability Engineering File Page 4, section 1.4	Р
	- intended PATIENT population	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.4	Р
	<ul> <li>intended part of the body or type of tissue applied to or interacted with</li> </ul>	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.4	Р
	- intended USER PROFILE	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.5	Р
	- intended USE ENVIRONMENT	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.6	Р
	- operating principle	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.7	Р
5.2	The MANUFACTURER shall identify USER INTERFACE characteristics that could be related to SAFETY as part of a RISK ANALYSIS performed according to ISO 14971:2019, Clause 5.3	QF-GT-DJD-7.3.2-16Usability Engineering File Page 6, section 2	Р

shall identify known or foreseeable HAZARDS and HAZARDOUS SITUATIONS which could affect PATIENTS, USERS or others, related to the use of the MEDICAL DEVICE.  5.4 The RISK ANALYSIS includes a description of all the reasonably foreseeable HAZARD-RELATED USE SCENARIOS associated with the identified HAZARD and HAZARDOUS SITUATIONS.  The description of each identified HAZARD and HAZARDOUS SITUATIONS.  The description of each identified HAZARD USE SCENARIO includes all TASKS and their sequences  The SEVERITY of the possible resulting associated HARM was determined  The SEVERITY of the possible resulting associated HARM was determined  SUMMATIVE EVALUATION as part of the USABILITY FILE. This SUMMATIVE EVALUATION shall include:  - all HAZARD-RELATED USE SCENARIOS:  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE:  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION plan for the USER INTERFACE EVALUATION p				
reasonably foreseeable HAZARD-RELATED USE SCENARIOS associated with the identified HAZARD and HAZARDOUS SITUATIONS.  The description of each identified HAZARD-RELATED USE SCENARIO includes all TASKS and their sequences  The SEVERITY of the possible resulting associated HARM was determined  The MANUFACTURER shall select the HAZARD-RELATED RELATED USE SENARIOS to be included in a SUMMATIVE EVALUATION as part of the USABILITY FILE: This SUMMATIVE EVALUATION shall include:  a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER Shall establish and maintain a USER INTERFACE SPECIFICATION  The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS of HAZARD-RELATED USE SCENARIOS and training capability, if needed, as described in the USER INTERFACE Bright file Page 8, section 3  QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.7, 1.8, 1.9  POCHOT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.7, 1.8, 1.9  POCHOT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.7, 1.8, 1.9  POF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.8  POF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.8  POF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.9  POF-GT-DJD-7.3.2-16Usability Engineering File Page 7, section 3	5.3	shall identify known or foreseeable HAZARDS and HAZARDOUS SITUATIONS which could affect PATIENTS, USERS or others, related to the use of the MEDICAL	Engineering File Page 6,	Р
USE SCENARIO includes all TASKS and their sequences The SEVERITY of the possible resulting associated HARM was determined  The SEVERITY of the possible resulting associated Endowment of the SEVERITY of the possible resulting associated Endowment of the USE SENARIOS to be included in a SUMMATIVE EVALUATION as part of the USABILITY FILE. This SUMMATIVE EVALUATION shall include:  SUMMATIVE EVALUATION shall include:  - all HAZARD-RELATED USE SCENARIOS; - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE EVALUATION plan for the USER INTERFACE SPECIFICATION  The MANUFACTURER shall design and implement the USER INTERFACE including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS or HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER Section 6  Engineering File Page 4, section 7  Document Reference No. in usability to proper the section 1.9  Pocument Reference No. in usability to proper the section 1.9  Pocument Reference No. in usability to proper the section 1.9  Pocument Reference No. in usability to proper the section 1.9  Pocument Reference No. in usability to proper the section 1.9  Pocument Reference No. in usability to proper the section 1.9  Pocument Reference No. in usability to proper the section 1.9  Pocument Reference No. in usab	5.4	reasonably foreseeable HAZARD-RELATED USE SCENARIOS associated with the identified HAZARD	usability engineering file: QF-GT-DJD-7.3.2-16Usability Engineering File Page 4,	Р
Engineering File Page 4, section 1.7  The MANUFACTURER shall select the HAZARD-RELATED USE SENARIOS to be included in a SUMMATIVE EVALUATION as part of the USABILITY FILE. This SUMMATIVE EVALUATION shall include:  - all HAZARD-RELATED USE SCENARIOS; - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE:  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  The MANUFACTURER shall establish and maintain a USER INTERFACE ENCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS or HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER section 6  Engineering File Page 4, section 1.7  Document Reference No. in USF-GT-DJD-7.3.2-16Usability Progineering File Page 7, section 3		USE SCENARIO includes all TASKS and their	Engineering File Page 4,	Р
RELATED USE SENARIOS to be included in a SUMMATIVE EVALUATION as part of the USABILITY FILE. This SUMMATIVE EVALUATION shall include:  SUMMATIVE EVALUATION shall include:  P - all HAZARD-RELATED USE SCENARIOS;  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  5.7 The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION.  Where new USE ERRORS, HAZARDOUS are discovered during this step the MANUFACTURER  SECTION 1.9  USABILITY ENGINEERING FILE:  USABILITY ENGINEERING FILE:  P DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION.  Where new USE ERRORS, HAZARDS, HAZARDOUS are discovered during this step the MANUFACTURER  P Engineering File Page 8, section 6			Engineering File Page 4,	Р
- a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE EVALUATION plan for the USER INTERFACE, including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS OF HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER  Pagineering File Page 8, section 6  QF-GT-DJD-7.3.2-16Usability Pagineering File Page 7, section 3  QF-GT-DJD-7.3.2-16Usability Pagineering File Page 7, section 3  Pagineering File Page 7, section 3	5.5	RELATED USE SENARIOS to be included in a SUMMATIVE EVALUATION as part of the USABILITY FILE.	usability engineering file: QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, 5	Р
based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which medical intervention would be needed); or  - a subset of the HAZARD-RELATED USE SCENARIOS based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  5.7 The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS OF HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER  Beginneering File Page 4, section 1.8  Pocument Reference No. in USABILITY ENGINEERING FILE:  Document Reference No. in USABILITY ENGINEERING FILE:  Progineering File Page 7, section 3  Progineering File Page 8, section 4  Progineering File Page 8, section 3  Progineering File Page 7, section 3  Progineering File Page 8, section 3  Progineering File Page 7, section 3  Progineering File Page 7, section 3		- all HAZARD-RELATED USE SCENARIOS;		Р
based on the SEVERITY of the potential HARM and based on other circumstances specific to the MEDICAL DEVICE and the MANUFACTURER  A summary of any selection scheme, the rationale for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE  The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS or HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER  Engineering File Page 4, 5 section 1.9  Document Reference No. in USABILITY ENGINEERING FILE:  Document Reference No. in USABILITY ENGINEERING FILE:  PHOTO DOCUMENTATION IN USAB		based on the SEVERITY of the potential HARM that could be caused by USE ERROR (e.g. for which	Engineering File Page 4,	Р
for its use and the results of applying it shall be stored in the USABILITY ENGINEERING FILE:  5.6 The MANUFACTURER shall establish and maintain a USER INTERFACE SPECIFICATION  5.7 The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE EVALUATION plan for the USER INTERFACE, including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS OF HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER  USABILITY ENGINEERING FILE:  P QF-GT-DJD-7.3.2-16Usability Engineering File Page 7, section 3		based on the SEVERITY of the potential HARM and based on other circumstances specific to the	Engineering File Page 4, 5	Р
USER INTERFACE SPECIFICATION  Engineering File Page 7, section 3  The MANUFACTURER shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE EVALUATION plan for the USER INTERFACE  The MANUFACTURER shall design and implement the USER INTERFACE, including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION		for its use and the results of applying it shall be		Р
USER INTERFACE EVALUATION plan for the USER INTERFACE  The MANUFACTURER shall design and implement the USER INTERFACE, including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION	5.6		Engineering File Page 7,	Р
USER INTERFACE, including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE SPECIFICATION  Where new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS OF HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER  Engineering File Page 7, section 3  P Engineering File Page 7, section 3	5.7	USER INTERFACE EVALUATION plan for the USER	Engineering File Page 8,	Р
SITUATIONS OR HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER Engineering File Page 8, section 6	5.8	USER INTERFACE, including the ACCOMPANYING DOCUMENTATION if needed, and training capability, if needed, as described in the USER INTERFACE	Engineering File Page 7,	Р
		SITUATIONS OR HAZARD-RELATED USE SCENARIOS are discovered during this step the MANUFACTURER	Engineering File Page 8,	Р

	If training on the specific MEDICAL DEVICE is required for the safe us of the MEDICAL DEVICE by the intended USER, the MANUFACTURER shall design and implement a training capability for the EXPECTED SERVICE LIFE of the MEDICAL DEVICE by doing at least one of the following:	Engineering File Page 9,	Р
	- provide the materials necessary for training;	QF-GT-DJD-7.3.2-16Usability Engineering File Page 9, section 7.2	Р
	- ensure the materials necessary for training are available;	QF-GT-DJD-7.3.2-16Usability Engineering File Page 9, section 7.2	Р
	- make the training available; or	QF-GT-DJD-7.3.2-16Usability Engineering File Page 9, section 7.2	Р
	- make training available to the RESPONSIBLE ORGANIZATION that enables it to train its USERS	QF-GT-DJD-7.3.2-16Usability Engineering File Page 9, section 7.2	Р
5.9	The MANUFACTURER shall perform a SUMMATIVE EVALUATION of each HAZARD-RELATED USE SCENARIO selected in Clause 5.5	Document Reference No. in usability engineering file: QF-GT-DJD-7.3.2-16Usability Engineering File Page89, section 6	Р
	All USE ERRORS and use difficulties that occurred shall be identified	QF-GT-DJD-7.3.2-16Usability Engineering File Page89, section 6	Р
	Where USE ERROR or use difficulty can lead to a HAZARDOUS SITUATION the root causes should be determined	QF-GT-DJD-7.3.2-16Usability Engineering File Page89, section 6	Р
	If new USE ERRORS, HAZARDS, HAZARDOUS SITUATIONS or HAZARD-RELATED USE SCENARIOS are discovered during this data analysis:		N/A
	- if yes, then the MANUFACTURER shall repeat the activities of Clause 5 as appropriate;		N/A
	- if not, then the MANUFACTURER determine whether further improvement of the USER INTERFACE design as it relates to SAFETY is necessary and practicable		N/A
	If yes, then the MANUFACTURER shall re- enter the USABILITY ENGINEERING PROCESS at Clause 5.6		N/A
	2) If not then the MANUFACTURER shall:		N/A
	Document why improvement is not necessary or not practicable;		N/A
	ii) Identify the data from the USABILITY ENGINEERING PROCESS needed to determine the RESIDUAL RISK related to use; and		N/A
	iii) Evaluate the RESIDUAL RISK according to ISO 14971:2019, Clause 7.3		N/A

5.	 was evaluated according to Annex C rather than	See Appended Annex C below	Р
	the requirements of 5.1 through 5.9.		

Annex C	Evaluation of a USER INTERFACE OF UNKNOWN PROVENANCE (UOUP)		
C.2.1	The MANUFACTURER shall establish a USE SPECIFICATION as required in 5.1.	Document Reference No. in usability engineering file:  QF-GT-DJD-7.3.2-16Usability Engineering File	Р
C.2.2	The MANUFACTURER of a device with UOUP shall review POST-PRODUCTION information including complaints and field reports for incidents and near incidents. All identified cases of USE ERROR shall be stored in the USABILITY ENGINEERING FILE and addressed in C.2.3 and C.2.4	Document Reference No. in usability engineering file: QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.8	Р
C.2.3	The MANUFACTURER shall review the RISK ANALYSIS of the MEDICAL DEVICE with UOUP and ensure that all HAZARDS and HAZARDOUS SITUATIONS associated with USABILITY have been identified and documented	Document Reference No. in usability engineering file: QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 6	Р
C.2.4	The MANUFACTURER shall verify and document that adequate RISK CONTROL measures have been implemented for all identified HAZARDS and HAZARDOUS SITUATIONS identified in C.2.3 and that all RISKS are reduced to an acceptable level as indicated by the RISK ASSESSMENT	Document Reference No. in usability engineering file: QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 6	Р
C.2.5	Based on any new information identified in performing steps C.2.3 and C.2.4 the MANUFACTURER re-evaluated the overall RESIDUAL RISK according to ISO 14971:2019, Clause 7.3 and documented the results in either the USABILITY ENGINEERING FILE OR RISK MANAGEMENT FILE	Document Reference No. in usability engineering file or Risk Management File: GT-RM2017-001	Р

Table 5.3 USABILITY ENGINEERING FILE RESULTS TABLE: RISK ANALYSIS			
	Document Ref. in USABILITY ENGINEERING FILE	Result - Remarks	Verdict
An identification of known or foreseeable HAZARDS and HAZARDOUS SITUATIONS which could affect PATIENTS, USERS or others, related to the use of the MEDICAL DEVICE. was performed according to ISO 14971:2019, Clause 5.3	QF-GT-DJD-7.3.2-16Usability Engineering File		P
During the identification of HAZARDS and HAZARDOUS SITUATIONS, the following was considered:			_
- USE SPECIFICATION, including USER PROFILE(S) (See 5.1)	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.5	Acceptable according to IEC 62366-1	Р
- information on HAZARDS and HAZARDOUS SITUATIONS known for existing USER INTERFACES of MEDICAL DEVICES of a similar type, if available; and	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.5	Acceptable according to IEC 62366-1	Р
- identified USE ERRORS (see 5.2).	QF-GT-DJD-7.3.2-16Usability Engineering File Page 4, section 1.5	Acceptable according to IEC 62366-1	Р

Table 5.6 USABILITY ENGINEERING FILE RESULTS TABLE: USER INTERFACE SPECIFICATION			
	Document Ref. in USABILITY ENGINEERING FILE	Result - Remarks	Verdict
USER INTERFACE SPECIFICATION	QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р
The USER INTERFACE SPECIFICATION sha	Il consider:		_
- the USE SPECIFICATION (See 5.1)	QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р
the known or foreseeable USE     ERRORS associated with the medical device (See 5.2); and	QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р
- the HAZARD-RELATED USE SCENARIOS (See 5.4)	QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р
Inputs to the USER INTERFACE SPECIFICATION shall include the following:			_

Table 5.6	le 5.6 USABILITY ENGINEERING FILE RESULTS TABLE: USER INTERFACE SPECIFICATION			
		Document Ref. in USABILITY ENGINEERING FILE	Result - Remarks	Verdict
testable technical requirements relevant to the USER INTERFACE, including the requirements for those parts of the USER INTERFACE associated with the selected RISK CONTROL measures;		QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р
	tion as to whether YING DOCUMENTATION is nd	QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р
	tion as to whether MEDICAL cific training is required	QF-GT-DJD-7.3.2- 16Usability Engineering File Page 7, section 3	Acceptable according to IEC 62366-1	Р

Table 5.7 USABILITY ENGINEERING FILE RESULTS TABLE: USER INTERFACE EVALUATION plan				
·		Document Ref. in USABILITY ENGINEERING FILE	Result - Remarks	Verdict
The manufacturer shall establish and maintain a USER INTERFACE EVALUATION plan for the USER INTERFACE		QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
The USER INT	ERFACE EVALUATION	ง plan shall document:		_
a) the objective and identify the method of any planned FORMATIVE EVALUATIONS and SUMMATIVE EVALUATIONS b) if USABILITY TESTS are employed, — document which USER GROUPS are intended to be included in the test; — document the test environment and other conditions of use, based on the USE SPECIFICATION;		QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
		QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
		QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
<ul><li>specify wh</li><li>ACCOMPANYIN</li><li>DOCUMENTAT</li><li>during the test</li></ul>	NG TON is provided	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
DEVICE-speci provided prio the minimum	or to the test and n elapsed time training and the	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
The USER INTERFACE evaluation		plan for FORMATIVE EVALUATION S	hall address:	_
a) the evalua being used;	ation methods	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р

Table 5.7 USABILITY ENGINEER	RING FILE RESULTS TABLE: USER	R INTERFACE EVALUATION plan	
	Document Ref. in USABILITY ENGINEERING FILE	Result - Remarks	Verdict
b) which part of the USER INTERFACE is being evaluated; and	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
c) when in the USABILITY ENGINEERING PROCESS to perform each of the USER INTERFACE EVALUATIONS.	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
	ATED USE SCENARIO (see 5.5), the USER INTERFACE EVALUATION		_
a) the evaluation method being used and a rationale that the method produces OBJECTIVE EVIDENCE;	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
b) which part of the USER INTERFACE is being evaluated;	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
c) where applicable, the criteria for determining whether the information for SAFETY is perceivable, understandable and supports CORRECT USE of the MEDICAL DEVICE (4.1.3);	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
d) the availability of the ACCOMPANYING DOCUMENTATION and provision of training during the SUMMATIVE EVALUATION; and	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
e) for a USABILITY TEST,  – how the characteristics of the test participants are representative of the intended USER PROFILES;	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
<ul> <li>justifying how the test participants are grouped into distinct USER GROUPS for the purpose of determining the number of test participants;</li> </ul>	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4		Р
<ul> <li>the test environment and conditions of use and a rationale for how they are adequately representative of the intended USE ENVIRONMENT;</li> </ul>	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р
<ul> <li>the definition of CORRECT</li> <li>USE for each HAZARD-RELATED</li> <li>USE SCENARIO; and</li> </ul>	QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4	Acceptable according to IEC 62366-1	Р

Table 5.7	USABILITY ENGINEERING FILE RESULTS TABLE: USER INTERFACE EVALUATION Plan			
		Document Ref. in USABILITY ENGINEERING FILE	Result - Remarks	Verdict
the method of collecting data during the USABILITY TEST for the subsequent analysis of observed USE ERRORS and use difficulties.		QF-GT-DJD-7.3.2-16Usability Engineering File Page 8, section 4		Р