

Medical Device Single Audit Program

Neil A. Mafnas, CDR, USPHS International Affairs Center for Devices and Radiological Health U.S. Food and Drug Administration



Overview of MDSAP

Certificate and Audit Report

MDSAP Audit Approach

Assessment Program

What is MDSAP? Medical Device Single Audit Program

MDSAP Summary

Multi-RA Harmonization Effort

Third Party Auditing Organizations Perform quality management system audits and provide audit reports to regulatory authorities

MDSAP is managed by regulators

from Australia, Brazil, Canada,

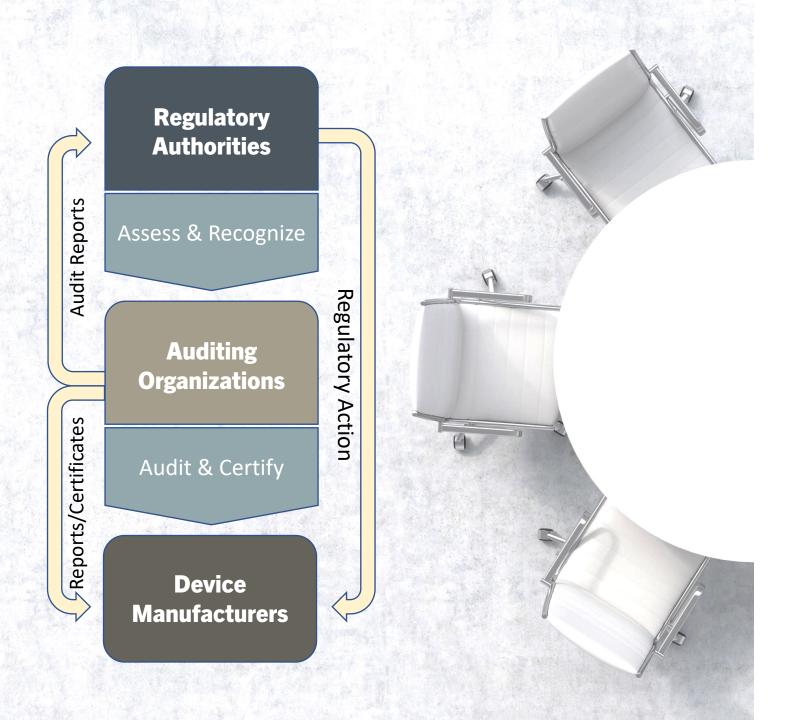
Japan and the U.S.

Single Regulatory Audit

Mutual Acceptance Independent Reviewed At least one audit annually against ISO 13485:2016 plus countryspecific requirements

Regulators accept audit reports that include their jurisdiction. Reports are evaluated independently for possible regulatory action

MDSAP TIMELINE Pre-Pilot Transition Pilot **From CMDCAS To MDSAP** DNESDAY 2018-2020-2012-2016-2022-2014-2021 2023 2019 2013 2015 2017 SEPTEMB FRIDAY **Statement** Japan Joins ofSDAY **COVID-19** Cooperation **MDSAP Pandemic MDSAP Becomes Operational**



6,800+

Medical Device Manufacturing Sites 3 Year Certification Program

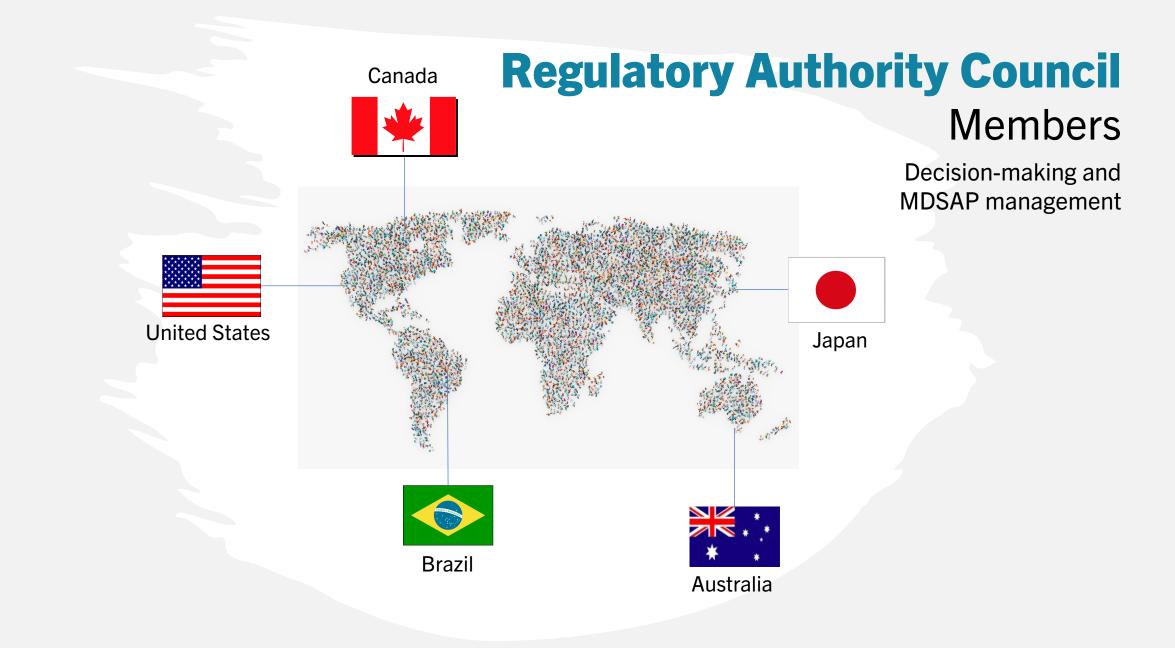
16 A0s

Audit Manufacturers Annually Audit Reports Submitted to RAs 4 Year Assessment Program

5 RAs

Evaluate AOs Annually Utilize Reports and/or Certificates Take Appropriate Regulatory Action

Membership





European Union

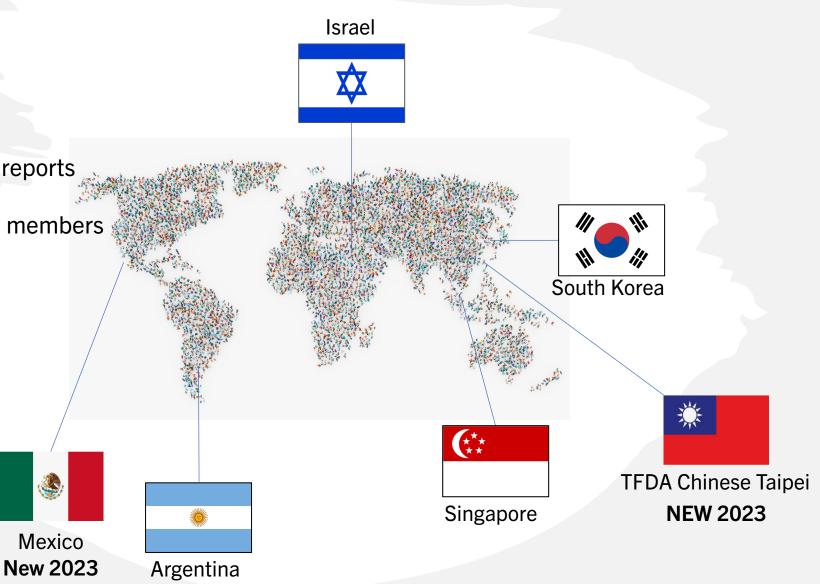
Affiliate

Members

Utilization of MDSAP audit reports Program promotion Capacity building with RAC members

Requirements

- Regulatory Authority
- MDSAP Knowledge
- Plan to implement use
- Training & Meeting obligations
- Annual Report on MDSAP Use
- Promote MDSAP



How does an RA apply?

https://www.fda.gov//media/164361/download?attachment

TRAINING - https://www.fda.gov/training-and-continuing-education/cdrh-learn

Single Application

Explanation on how

requirements are met

Plan for MDSAP use



MDSAP MEMBERSHIP APPLICATION FORM

This form may be used when requesting any type of membership to MDSAP. Document MDSAP P0003 includes information on the roles and responsibilities for all MDSAP membership types. Applications or questions must be submitted to the Chair of the MDSAP Regulatory Authority Council Secretariat (RAC). For additional information, please refer to the MDSAP web page: https://www.fda.gov/medicaldevices/internationalprograms/mdsappilot/

Contact Details for Applicant: Name of Applicant Organization:

Contact Person(s): Title: Address: Phone: Email:

Type of Membership Requested:

Affiliate Member
 Official Observer
 RAC Member



Auditing Organizations

Recognized



Question

Which country was the last to join MDSAP as a Regulatory Authority Council member?

a. Japan b. Australia c. South Korea d. Brazil



Question

MDSAP Affiliate must have confidentiality commitments with RAC members.

a. True b. False c. It depends





Benefits & Regulatory Use

Benefits

1 Audit 13 MDSAP RAs WHO pre-qual program Use in other countries

Predictable Objective NC Grading

Single Audit Approach ISO 13485:2016

AOS Choice of AO Audit other schemes

Reduced Durden Transparent Online documentation RA-A0 Interactions

ISO 13485:2016 Limit of country-specific requirements Streamline RA workload

Reliable **AO Assessments** Audit Approach

Continuous Improvement Strong Criteria

RA-AO Interactions

MDSAP audit reports and certificates provide evidence of compliance with medical device conformity assessment procedures & marketing authorization requirements

AUSIA C

100 TGA audits have been canceled or postponed due to MDSAP

95% of MDSAP manufacturing sites listed on TGA CA certificates no longer scheduled for TGA audits





MDSAP audit may be used in-lieu of a ANVSIA premarket inspection to grant a class III or IV GMP certificate

Accelerates GMP certification process and MDSAP is considered for bi-annual GMP certificate renewal

2023 Update - PILOT under public consultation to use MDSAP certificates to grant device recertification and to extend the certificate period of validity from 2 to 4 years

MDSAP certification required to maintain or obtain a new Class II, III or IV medical device license

Audit reports and Nonconformity forms are used in post-market analysis

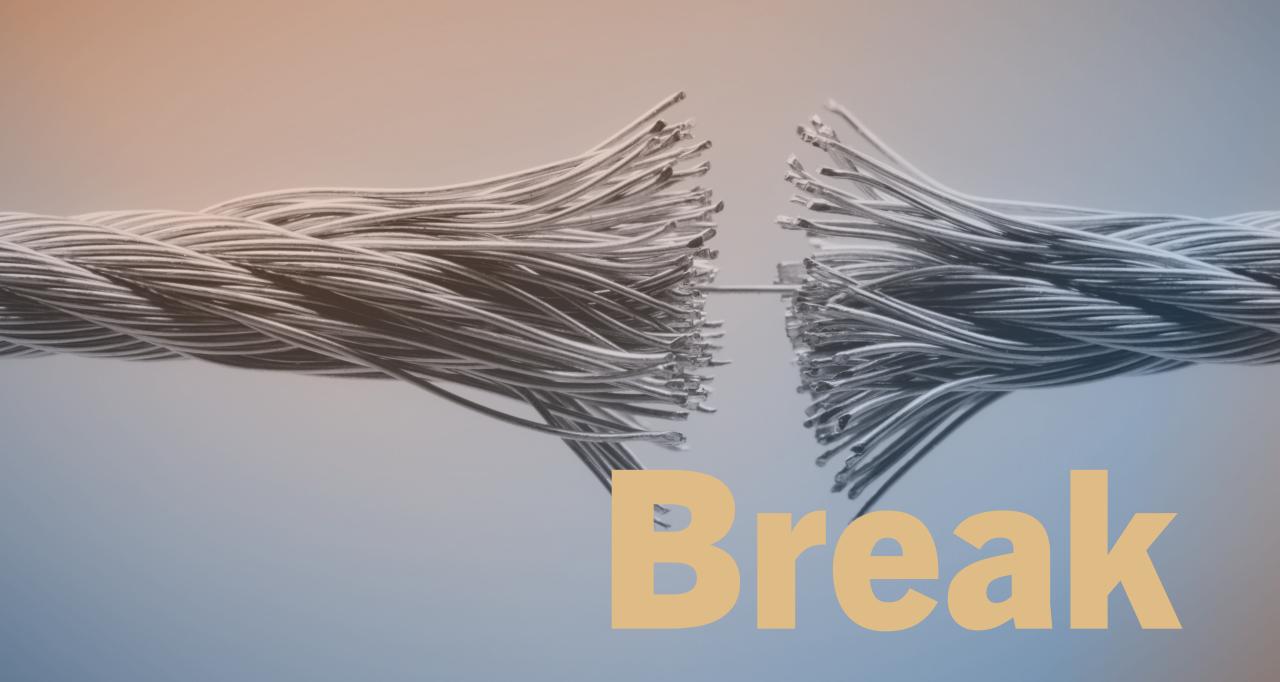
Streamline premarket and postmarket requirements

Exempt on-site inspection for some sites

In FY2022, 250 MDSAP audit reports were accepted for review for QMS inspection application

MDSAP audit reports accepted in-lieu of an FDA surveillance inspection

FDA still conducts For Cause, Compliance Follow-up, premarket and Electronic Product Radiation Controls inspections





MDSAP Certificate

Attestation of Conformity to Requirements

Manufacturer audited against ISO 13485 & Country Requirements and found to be in conformity with the scope of the audit on the certificate Written record of the Audit Team's determination of the extent of fulfillment of specified requirements

MDSAP Audit Report

PERIOD

ENGLISH

UNIQUE

MOM

NAME

1D CODE

DATEOF

ADDRESS

CERTIFICATION

VALIDITY

STATEMENT

5COPE OF CERT

ACTIVITES

DEVICES

CONFORMIN

ORGANIZATION

SIGNING

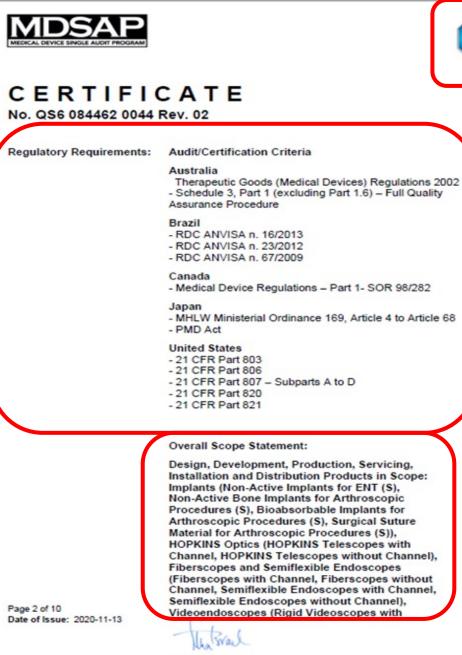
AUTHORIN

STATEMENT

RECOGNITION

VERIFICATION





CERTIFICAT

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(Tina Israel) Manager, US Certification Body, Medical and Health Services

Methods



Website



QR code



Email Request



27



	28

2023-10

	[1] QR code on certificate, [2] DNV website database link embeded posted on the Certificate		Yes
DNV Product Assurance AS	· · · · · · · · · · · · · · · · · · ·	DNV - Find a valid certificate	N -
DNV MEDCERT GmbH	Confirmation must be requested by e-mail	NA	No
DQS Medizinprodukte GmbH	DQS Global website to validate certifcates	https://www.dqsglobal.com/intl/about/certification/certificate- validation	No
IMQ S.p.A	by email, by writing to MDSAP@imq.it	NA	No
Intertek Testing Services NA Inc	By a request form on our website	https://www.intertek.com/business-assurance/certificate-validation/	Yes
G-MED	request through email	NA	No
NCC Certificações Do Brasil	NCC website	https://www.nccgroup.com.br/atuacao/mdsap/certificados-emitidos-mdsap/	
National Standards Authority of Ireland	NSAI Inc website (select approved client listing under the 'Company' heading)	Globally Recognized Management System Certification Services (nsaiinc.com)	
SGS United Kingdom Ltd.	SGS website to validate certificates. Need certificate ID, or company name and location. Currently being upgraded.	https://www.sgsgroup.cz/en/vr/certified-client-directory	No
TÜV Rheinland of North America Inc.	Certipedia Website + telephone number	https://www.certipedia.com/quality_marks	No
TÜV SÜD America, Inc.	QR code on certificate, TUV SUD website database	Certificate Explorer TÜV SÜD (tuvsud.com)	Yes
TÜV USA, Inc. (TÜV NORD Group)	There is a statement on the Certificate, "The validity of this certification document can be obtained by contacting the TUV USA, Inc. Office."	No Web Link, but in the certificate following information provided: Tel: 001-603-870-8023, Fax: 001-603-870-8026, Email: medical-usa@tuv- nord.com	No
UL Medical and Regulatory Services UL LLC	Go to UL Product IQ search page	https://productig.ulprospector.com/en/search?term	No

https://www.bsigroup.com/en-GB/validate-bsi-issued-certificates/ DEKRA Check.me (dekra-checkme.com)

AO Methods

BSI website to validate certificates

website

BSI Group America Inc

DEKRA Certification BV



No

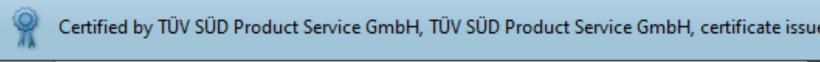
No

Digital Signature

- Certificate Authentication (traceable to TÜV SÜD LE)
- Signature from EUTL (European Union Trusted List)
- Protection from any Modification (checksum with signature provider)

la

- Long Term Validation (functionality remains intact even after expiration of the signature)
- Signature registered with CNCA (Certification and Accreditation Administration of the PRC)



	Signatures	•
٩	8=-	Validate All
	😑 🥷 Certified by TÜV SÜD Product Service GmbH	
?	Only form fill-in, signing and page adding actions are allowed	
	Valid certified Document:	
8	Changes have been made to this document that are permitted b	y the certifyir
	Signer's identity is valid	
	Signing time is from the clock on the signer's computer.	
	Signature is LTV enabled	
	Signature Details	
	Last Checked: 2023.10.23 15:18:59 -03'00'	
	Field: Signature1 (invisible signature)	

Question

Which is not required to be on the MDSAP certificate?

a. Period of Validity
b. Audit Team Members
c. Manufacturer Address
d. Signing Authority





3 4-5

1-2

Medical Device Regulatory Audit Report

6 7-10 11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8 12 13-15 16 17-18

null-AUR-null-null / null	
From	То

Sec	ction 1. Audi	it Information						
Au	diting Organizat	tion						•
Au	dit Starting Date)	Audit Ending Date			Duration of	f Audit (in auditor-days)
AO	Audit Report R	ef		Language	es used during	the audit		
Aud	lit Team							
-	Team Member							
+	Role	Lead Auditor	Auditor Technica	al Expert	Auditor i	n training	Observer	Interpreter
	Affiliation	AO Employee	CExternal Resource: Orga	anization				

Section 2. Audited Facil	ity						
Name of the Audited Facility						MDSAP Facil	ity Identifier
Street Address							
Address Details (Building, Appa	rtment, Suite #,), as aj	oplicable					
City		Country	Stat	te/Province		Zip Cod	le
			•				
Contact Person Name	Title		Email			Telepho	ne
Senior Management at the Au	dited Facility (Name ar	nd Title)					
Facility Identification Number(s) - if no number or field	l is not applicable, in	idicate NA. Lin	ik to RA databases ->	Australia Bra	izil Canada	Japan USA
Australia - TGA	Brazil - ANVISA	Canada - I	Health Canada	Japan - MHLW/PMD	A U	SA - FDA	
Other Jurisdictions							

Section 3. Certification Schemes, Scopes & Criteria, Audit Types									
MDSAP Certification Scheme									
Audittune	O Initial (Surveillance #1	Surveillance #2	Recertification	C Special			Mock	
Audit type	Specify								
Scope of certification				in the scope of certifica			Yes	No	
		of of certification re	vised compared to the	currently valid certificat	tion (if applicable)			
K ISO 13485	2003	02016							
Australia									
Brazil									
Canada									
Japan									
United States									
Other reference doc.									

CE Marking Certificati	ion Scheme							Not Applicable
	Initial	🔵 Surv. #1	O Surv. #2	🔵 Surv. #3	🔵 Surv. #4	Recertification	Special	C Unannounced
Audit type	Specify							
Scope of certification	New or re	evised						
	Medical D	Device Directive	93/42/EEC (MI	DD)				
Europa	Active Im	plantable Medic	al Device Direc	tive 90/385/EE	C (AIMD)			
Europe	📃 In Vitro D	iagnostic Medica	al Device Direc	tive 98/79/EC (I	VDD)			
	Other, sp	ecify:						
Other reference Doc.								
Other Certification Sc	hemes							Not Applicable
Certification scheme								
	Initial	C Surveillanc	e #1 🔵 Sur	veillance #2	Recertificat	ion 🔵 Special		ced
Audit type	Specify							
Scope of certification	New or re	evised						
Certification criteria								
Other reference doc.								
Add a Certificat	tion Scheme					Remove the	e Certification Sc	heme Above

🔵 Yes 🔵 No
🔵 Yes 🔵 No
🔵 Yes 🔵 No
See details in Attachment

Section 5. Audit Objectives

Audit objectives shall include as applicable:

Initial Stage 2: evaluation of:

• the effectiveness of the manufacturer's QMS incorporating the applicable regulatory requirements;

product/process related technologies;

adequate product technical documentation in relation to relevant regulatory

requirements; and,

the manufacturer's ability to comply with these requirements.

Surveillance audit: evaluation of:

the effectiveness of the manufacturer's QMS incorporating the applicable regulatory requirements;

the manufacturer's ability to comply with these requirements;

new or changed product/process related technologies; and,

new or amended product technical documentation in relation to relevant regulatory requirements.

Recertification audit: evaluation of:

the effectiveness of the manufacturer's QMS incorporating the applicable regulatory requirements;

product/process related technologies (e.g. injection molding, sterilization);

adequate product technical documentation in relation to relevant regulatory

requirements; and,

the manufacturer's continued fulfillment of these requirements.

Section 6. Audited Facility Description							
Regulatory Roles played by the Audited Facility, considered in the scope of the audit							
Europe Manufa	cturer Importer Distributor System or Procedure Pack Authorized Representativ	'e					
Other							
Activities at the Audited Fac	ility						
Audited Facility Address							
	Design and Development Purchasing Management (regulatory affairs)						
	Production (finished device) Production (sterilization) Servicing						
	Production Production Installation (in-process, other than sterilization)						
	Production (device-drug combination) Production (packaging / labeling) (verification of purchased production Preservation (storage / delivery) Monitoring and Measurement processes, product)	:t /					
null - null, null, null, null	Production (device-biologic combination) Production (refurbishment) Monitoring and Measurement (Final product release)						
	Other, specify:						
	Activities taking place at that address that are not included in the Scope of Certification (NA if none)						
	Number of staff Number of shifts Number of staff working in shifts						

X Attach the list of medical devices relevant to each address, including for each jurisdiction the class and the marketing authorization number

Sec	Not Applicable							
	Check if Critical Supplier List is attached Note: Suppliers that have been visited in connection with the audit of this facility must be listed below.							
	Organization							
+	Address		City	State/Province	Zip Code	Country		
-								
	Products or services used in au	udited processes						
	Was the supplier visited jointly	with the Audited Facility?	🔵 Yes 🔵 No					
Sec	tion 8. Audit History (All	Audit / Certification Scl	heme Considered)		Non Appl	icable (No prior audit)		
1	of prior audit reports taken int s" or "pre-assessment audit")	to account in the preparatio	n of the audit and/or for the	grading of nonconform	ities (including	"mock audits", "gap		
	Audit Date	Audit Report Reference		Audit Type				
+	-							
Sun	Summary of findings from prior audit listed above							

Section 9. Exclusions and Non-Applications of Requirements in the QMS

Section 10. Outcome of Pre-Audit Activities (including Stage 1 as applicable)

Check if documentation of Pre-Audit Activities is attached

Section 11. Audit Findings

Section 11. Addit 1 mailings							
Section 11.1 - Process: Management			Not au	dited			
Completed Audit Tasks (check all that apply)							
 1. Quality Management System Planning 2. Management Representative 3. Quality Policy and Quality Objectives 4. Organizational Structure 	 5. Extent of Outsourcing 6. Personnel Competency & Training 7. Risk Management Planning and Review 8. Document Controls 	11. Top Management Commitment to					
A. Organizational Structure, Responsibility, Authority, Resources Description of the audited process or activity, and area (physical or organizational) Major changes observed?							
Key documents reviewed related to this sp	ecific process or task						
Names and Titles of persons interviewed							
Nonconformity? 🔵 No 🦳 Y	es						

Concluding statement regarding whether the audited activities/processes are in conformity with the audit criteria

Section 12. Nonconformities	Import Nonconformity Information	
NC Ref #	Statement of Nonconformity / Supporting Evidence	ISO 13485 Grade

Section 13. Significant Deviati	ions from the Au	udit Plan	
Duration of the Audit (in auditor-days)	Planned	Actual	
Obstacles			
Section 14. Follow-up of Past	Nonconformitie	s (record details of the review in t	the nonconformity reports)
Section 14. Follow-up of Past Reference of the no		s (record details of the review in t Status of the nonconformity	the nonconformity reports) Not Applicable Reference of new superseding nonconformity, if applicable
		·	Reference of new superseding
Reference of the no	onconformity	Status of the nonconformity	Reference of new superseding nonconformity, if applicable
Reference of the no	onconformity	Status of the nonconformity	Reference of new superseding nonconformity, if applicable
Reference of the nor + - Check if any record of the follow-up	onconformity	Status of the nonconformity	Reference of new superseding nonconformity, if applicable
Reference of the nor + - Check if any record of the follow-up	onconformity	Status of the nonconformity	Reference of new superseding nonconformity, if applicable

Total # of Open Nonconformities (NC):	Including # of NCs from Past Audits Left Open:	# of NC Issued During this Audit:
Conformity with Audit Criteria		
Effectiveness of the QMS in meeting Quality Objectives		
Achievement of Audit Objectives		
Factors encountered that may affect the Audit Reliability		
Recommendations on the Certification Status		
Recommendations on Follow-up Actions		

Sec	tion 17. Attachments
	List of Audit Report Attachments
	Audit Plan
	List of medical devices
+	
Sec	tion 18. Audit Report Approval

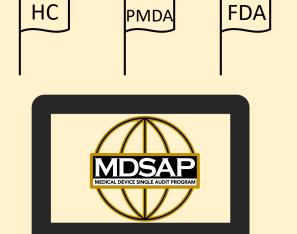
Approver	
Title	
Signature	

HOW ARE AUDIT REPORTS SUBMITTED?

AUDIT REPORT TIMELINES 45 OR 90 CALENDAR DAYS

Regulatory Exchange Platform — secure (REPs)

°C



ANVISA

TGA

AUDITING ORGANIZATION

Let's Look at an example!



Medio	cal Device Regulatory Audit Re	port	Reference # 8417853 Audited Facility Bioventus LLC			
		Audit S	tarting Date	2016-07-18		
Audit Report Ref	ference # (assigned by the AO): 8417853					
Section 1. Au	diting Organization (AO)		DUNS#	04-738-9387		
AO Name:	Auditing Org.					
Section 2. Au	dited Facility		DUNS#	07-845-1540		
Organization:	Bioventus LLC					
Address:	1900 Charles Bryan Road, Ste 275					
City:	Cordova State/Province: TN					
Country:	United States Zip/Postal Code: 38016					
GEOCODE (visit v determine coordin	www.freegeocoder.com to Latitude: 35.176597	Longi	tude	-89.826974		

Section 2.1 Audit	ted Facility C	ontact Person					∕i: ∕		
Name:	Keith Big	gs		Title:	Senior Manager of Quality (b)(6)				
Telephone:	(b)(6)		Email:					
Section 2.2 Facil	ity Identificat	ion Number(s)	- if no number o	r field is not a	pplicable, indi	cate NA			
Jurisdiction		Identificatio	on Number		Jurisdiction	E.	Ide	entificat	ion Number
Australia - TGA			(b)(4)		Brazil - ANVISA		N	NA	
Canada - Health (Canada		(b)(4)		United States - FDA 3010203571		571		
Japan - MHLW an	Id PMDA	NA							
2.3 Manufacture	(as specified	on product lab	eling, if different f	from audited f	facility)				Same as Audited Facility
Organization:				1948) 9 046		DUNS	# 00-	000-000	
Address:	4721 Emp	eror Blvd, Suite	ə 100						
City:	Durham			State/Pr	ovince: North C	arolina			
Country:	United States				Zip/Postal Co	de: 27703			
GEOCODE (visit v determine coordin	it www.freegeocoder.com to					9954			

2.4 Identification Number(s) of Manufacturer - if no number or field is not applicable, indicate NA						
Jurisdiction	Identification Number	Jurisdiction	Identification Number			
Australia - TGA	(b)(4)	Brazil - ANVISA	NA			
Canada - Health Canada		United States - FDA	30095995577			
Japan - MHLW and PMDA	NA					

Section 3. Audit Ty	vpe & Criteria				MDSAP AUDIT?	YES
Initial	Surveillance #	Re-ce	ertification	Special	🗌 Una	innounced
Other, specify:						
Clarifications, if necessa	ry:					
3.1 - Jurisdiction and Audit Criteria (exclusions to be listed in section 9)						
Standards	K ISO 13485	Other, specify:	ISO 9001:2008	3		

3.1 - Jurisdiction and Audit Criteria (exclusions to be listed in section 9)					
Standards	K ISO 13485	Other, specify:	ISO 9001:2008		
Jurisdictions and c	orresponding Medical De	vice Regulations	17		
Australia		(b)(4)Foreign Regulations			
D Brazil					
🔀 Canada					
🔲 Japan					
United States	21 CFR Part 803 - Medic	al Device Reporting	na na sana ana ang ang ang ang ang ang ang ang		
	21 CFR Part 806 - Repor	ts of Corrections and Remo	ovals		
	21 CFR Part 807 (Subpa	rts A to D) - Establishment	Registration and Device Listing	g	
	🔀 21 CFR Part 820 - Q	uality System Regulation			
	21 CFR Part 821 - D	evice Tracking			

Europe	(b)(4)Foreign Regulations
Other Jurisdiction	Regulation
	+ -
Documents used as reference for the audit MDSAP AU P002.003 - MDSAP Audit Model	

Section 4. Scope of Audit Program / Certification

If this is an ISO 13485:2003 under MDSAP audit ensure a full description of each type of activity and medical device covered.

		Audit / Certification Scheme	Scope of Audit Program / Certification	New or Amended?	Active Certificate?
+	1	MDSAP	Design, Development, Manufacture and Distribution of Non-Animal Hyaluronic Acid Based Implants. Design, Development, Manufacture, Distribution and Servicing of Active Ultrasonic Fracture Healing Systems	No	Yes
+	-	ISO 13485:2003 (CMDCAS)	Design, Development, Manufacture and Distribution of Non-animal Hyaluronic Acid Based Implants. Design, Development, Manufacture, Distribution and Servicing of Ultrasonic Fracture Healing Systems	No	Yes
+		ISO 9001:2008	Design, development and manufacture of Exogen and Durolane Devices	No	Yes
+	-	MDD 93/42/EEC, Annex II	Design, development and manufacture of active ultrasonic fracture healing systems and non-animal hyaluronic acid based implants	No	Yes
4.1 -	Sco	pe of Audit Program / (Certification at the Audited Facility (if different than above)	Not	Applicable
		Audit / Certification Scheme	Scope of Audit Program / Certification	New or Amended?	Active Certificate?
+	-	MDSAP	Manufacturing, customer service, design and development, purchasing, receiving and incoming inspection.	No	Yes
+	-	ISO 13485:2003 (CMDCAS)	Manufacturing, customer service, design and development, purchasing, receiving and incoming inspection.	Νο	Yes

4.2 - Related Sites (included in the Scope of Audit Program / Certification)					
	Related Site	Related Site DUNS	Relationship to Audited Facility	Related Site's Audit Report	
+ - Bioventus L	LC, Durham NC	07-845-0878	Headquarters	8356764	

Section 5. Audit Objectives

The objective of the assessment is to conduct a surveillance assessment to ensure continued effective implementation of the management system to applicable scope of registration in accordance with the company objectives, policies and procedures, applicable regulatory requirements, and the AO Terms of Service and to determine whether a recommendation for continued certification can be made.

5.1 - Audit Dates, Duration and Languages					
Audit Starting Date:	2016-07-18	Audit Ending Date:	2016-07-20	Audit Duration (in Auditor-Day):	5
Languages used:	English				

Section 6. Audited Facility Description

Total staff in the scope of the Audit Program:



Shift Work

6.1 Activities under the Audited Facility's responsibility

Performe	d in-house	Outsourc	ed
• Yes	(⊂ No	() Yes	No
• Yes	∩ No	• Yes	⊖ No
• Yes	∩ No	• Yes	⊖ No
• Yes	() No	() Yes	No
• Yes	⊖ No	() Yes	No
• Yes	⊂ No	⊖ Yes	No
() Yes	No	• Yes	⊖ No
• Yes	⊖ No	⊖ Yes	No
• Yes	⊖ No	() Yes	No
• Yes	⊖ No	() Yes	• No
• Yes	⊖ No	() Yes	🖲 No
	 Yes 	 Yes No 	 Yes

Clarifications, as necessary

Supartz and Durolane are manufactured and sterilized by a subcontractor. Exogen may have some component manufacture at a supplier however the finished device is manufactured/packaged by Bioventus LLC in Cordova TN.

6.2	Seni	or Management	of Audited Facility			
			Name	Title		
+	-	Anthony James	VP of Operations and Quality			
6.3.	Corp	orate Information	on			
ma	ny ł	nigh level proc	corporate office in Durham NC and a manufacturing site in Cordova TN. cedures with the Quality Management System. global provider of medical devices designed to help repair bones, allevia			
if m	ore	than 5, attach	uppliers (to include outsourced processes) the Critical Supplier list to the report	Not Applicable		
\boxtimes	Ch	eck if Critical Su	oplier List is attached			
	Cor	npany Name:				
	Ade	dress:				
+	- City: State/Province:					
	Co	untry:	Zip/Po	ostal Code:		
	Pr	oduct or service	s used in audited processes:			

Section 8. Audit History (All Audit / Certification Scheme Considered)

Non Applicable (No prior audit)

		Audit Date	Audit Report Reference		Audit Type
+	-	2015-08-12	8332490	Upgrade Assessment	

Summary of findings from prior audit listed above

There were three nonconformances raised during the last assessment. Two of the three nonconformances were completely closed out. One remains open, awaiting effectiveness verification. The actions taken for each of the nonconformances are documented below.

NCR: 1227051N1 - Closed

(b)(4)Foreign Regulations

NCR: 1227051N2 - No, awaiting effectiveness verification for the CAPA.

Nonconformance: The process for controlling product with a limited shelf-life was not found to be entirely effective. Procedure 0059997, Distribution Center, Rev 0, dated 2/20/14, states that the Distribution Centers shall not distribute product with less than 6 months shelf-life remaining. The Exogen Sonic kit contains gel with a 5 year shelf-life, but the shelf-life of the gel is not traceable to the kit. Therefore it is not possible to ensure there is at least 6 months of shelf-life remaining for the gel shipped with the Sonic kit.

Actions: CAPA-2015-018 was initiated in response to this nonconformance.

Containment: Not required, product turn around currently would not have any products meeting within 6 months of the 5 year shelf-life

Root Cause: A procedure has not been established which requires devices with a shelf-life to be appropriately controlled so as to prevent expired product from being placed on the market. Shelf life is not monitored/maintained for the system level SKUs and components.

Corrective Action Plan:

- 1. Determine components where shelf life is a concern
- 2. Establish expiry for part master data in SAP
- 3. Ensure expiry for system level SKUs is below or equal to expiry established for components.

4. The design transfer form will be revised to require the evaluation of product shelf life prior to product release for production

5. The process risk analysis procedure will be revised to require the evaluation of risks associated with distribution of expired product

6. The PFMEA for the Exogen Ultrasound Bone Healing System will be updated to cover the evaluation of risks associated with distribution of expired product.

7. Update 0059997 Distribution Center Specification to require reporting on item shelf life and guarantine items with remaining shelf life below minimum threshold.

Corrective Actions Taken:

1, 2 - Memo generate 7/19/16 - SAP Shelf Life Establishment for Exogen Systems and Gel Pump. Establish the required shelf life in SAP to ensure that items can be removed from stock locations prior to expiration and therefore won't be shipped. 3 Mome apparated 11/2/15 Project E11 SONIC 003 SONIC DHE on SONIC bettery device shalf life. Estimated that the

Section 9. Exclusions and Non-Applications of Requirements in the QMS

No exclusions are claimed. Non-application to ISO 13485 have been identified as the following areas: 7.5.1.2.2 - Installation activities

7.5.3.2.2 and 8.2.4.2 - Only aspects of relating to Active Implantable Medical Devices are not applicable

Section 10. Outcome of Pre-Audit Activities (including Stage 1 as applicable)

Check if documentation of Pre-Audit Activities is attached

Previous audit report

Section 11. Audit Findings							
MDSAP Audited Process 1. Manage		ment					
Related Audit Tasks (check all	that apply)						
X 1. Documented QMS		5. Extent of Outsourcing	🔀 9. Management Reviews				
2. Management Representative		8. Personnel Competency & Training	10. Device Marketing Authoriz Facility Registration	ation and			
3. Quality Policy and Quality Objectives		7. Risk Management Planning and Review	,,				
4. Organizational Structure, Responsibility, Authority, Res	ources	8. Document Controls	Quality	ment to			

Description of the audited process or activity, and area (physical or organizational): Major changes observed? CYes • No

The Quality Manual has been established to describe the structure and responsibilities of the multi-site corporation. The Quality Manual Section No. 5.2 In this sections of the manual the organization establishes its commitment to developing, implementing and maintaining the Quality Management System

- 3) Establishing a Quality Policy and Objectives
- a) The Quality Policy (defined in the Quality Manual) is appropriate to the organization
- b) Sections 5.2.4.1 of the QM is linked to the objectives and Management review. The objective are supportive of the Quality Policy are measurable. The policy is communicated via training and as revised using the internal "Biolearn" system.
- 4) Ensuring the availability of resources By reviews need during the Management review meetings as input to the meetings. Input include;
- a) Customer feedback
- b) Process Performance and and Product conformity
- c) Recommendations for Improvement
- d) Management With executive responsibility is responsible for ensuring the required resources are made available.

A Quality Policy has been established and is documented in the Quality Manual and reviewed for applicability and suitability during Management Review meetings. Management Representatives have been assigned for each site. Management Review meetings are held at scheduled frequencies (2X per year) with all sites participating. Required inputs are included for discussion during Management Review in addition to Quality Objectives and KPIs. The Quality Objectives are listed below. Key performance metrics have been established as goals for each metric to define success. The current KPI metrics utilize a red, yellow, green status. Review of the Quality Dashboard showed that generally being met, with no significant negative trends. Areas of concern may feed into Management Review action items or CAPAs. The Management Review meeting from June 2016 was reviewed during this assessment and found to Products or components relevant to the process or activity audited

Exogen, Durolane, Supartz

Key documents reviewed related to this specific process or task

Q100001-BC Rev. 1 - Quality Manual 0057382-BC Rev. 0 - Bioventus Quality Management Review (QMR) Procedure Management Review Meeting Minutes/Presentation June 28, 2016 2016 Top Level X-Matrix Bioventus No. Q1000001-BC Quality Manual Quality System Training Specification No. Q1 18002-BC Document and Records Control Specification No. Q10505003-BC Appendix A Quality System Record - (Document Control and records Retentions) Change Order procedure No. 00000-BC Internal Audit Quality Audit Program No. Q117004-BC REV B Operating the document Management System No. 0000255-BC Rev D

Numbe	r of records reviewed: 15	
Names	and Titles of persons interviewed:	
	Name (last, first)	Title
+ -	Keith Biggs	Sr Manager, Quality
+ -	Amber Trickett	Quality Engineer II
+ -	Mason Robbins	Regulatory Affairs Project Manager
Conclu	ding statement regarding whether the activity or process under audit	t is in conformity with the audit criteria
1.	on the documents and records reviewed, the Management compliance with audit criteria.	t processes reviewed were found to be effectively implemented
Nonco		ity must also be documented in the MDSAP Nonconformity Grading and the AO's nonconformity report form

Questions



Competency Requirements for Auditors

Affiliation MDSAP AO

KnowledgeISO 13485KnowledgeCountry-specificRequirementsMDSAP Training Program

Intro to MDSAP

Management

Measurement Analysis & Improvement

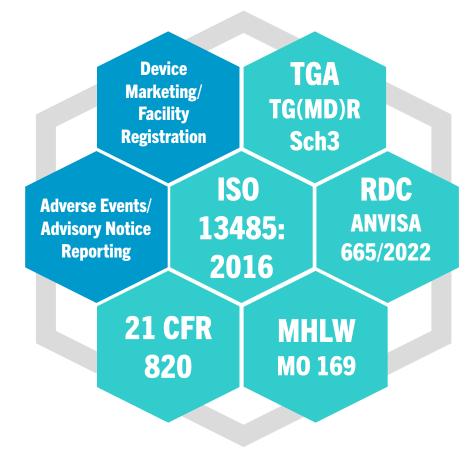
Production & Service

M DSAP Training

Purchasing

Device Marketing Authorization & Facility Registration

Adverse Event & Advisory Notice Reporting



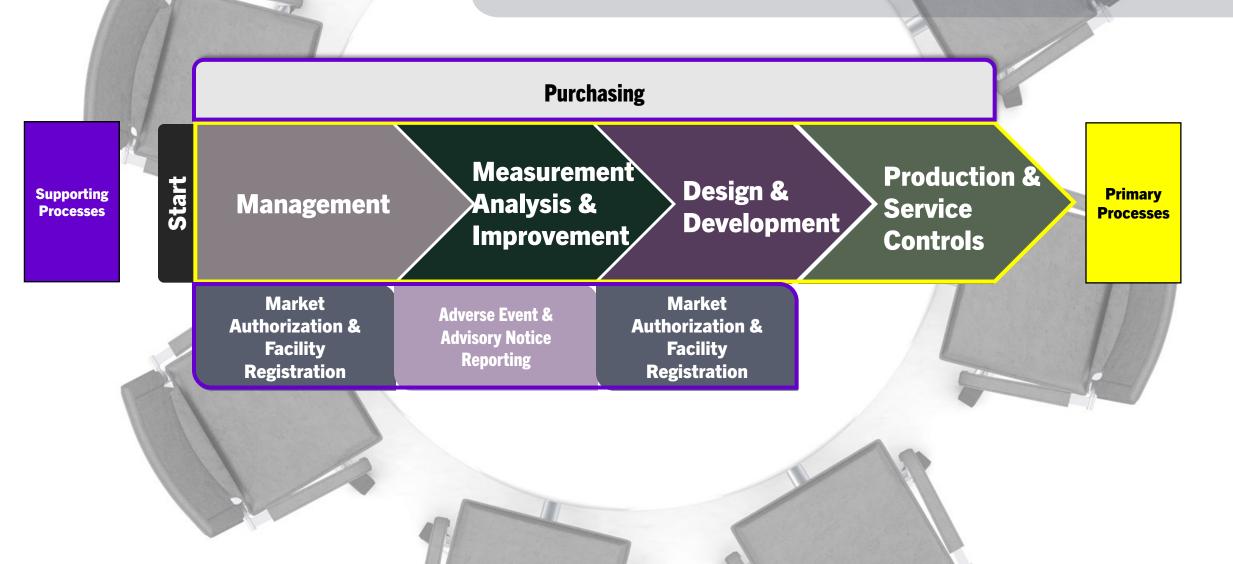
MDSAP Audits

QMS Requirements

Country-Specific Requirements

Foundation built on Risk

MDSAP Audit Approach Sequence



AUDIT APPROACH TASKS

Primary Processes

- Management (**11 tasks**)
- Measurement, Analysis & Improvement (**16 tasks**)
- Design & Development (**17 tasks**)
- Production & Service Controls (29 tasks)

Sub Processes

- Purchasing (12 tasks)
- Device Market Authorization & Facility Registration (3 tasks)
- Adverse Event & Advisory Notice Reporting (2 tasks)

90 Total Tasks

Purchasing, 14%

Production,

32%

Management, 12% Device Marketing Authorization, 3%

Meas. Analysis & Improvement, 18%

Design & Development, 19%

Adverse Event & Advisory Reporting, 2%

WHY IS THERE A SEQUENCE?

CONSISTENCY



Same order & flow Logical order

INFORMATION FLOW



Info drives audit decisions & controls communication INTERRELATIONSHIP



Identifies systemic problems

aller

MDSAP Audit Types

3 Year Audit Cycle - Initial

- Surveillance (2x)

- Recertification

Other Audits - Special

- Unannounced

- RA Audits



STAGE 1 Documentation Review



STAGE 2 On Site Audit

Full Audit



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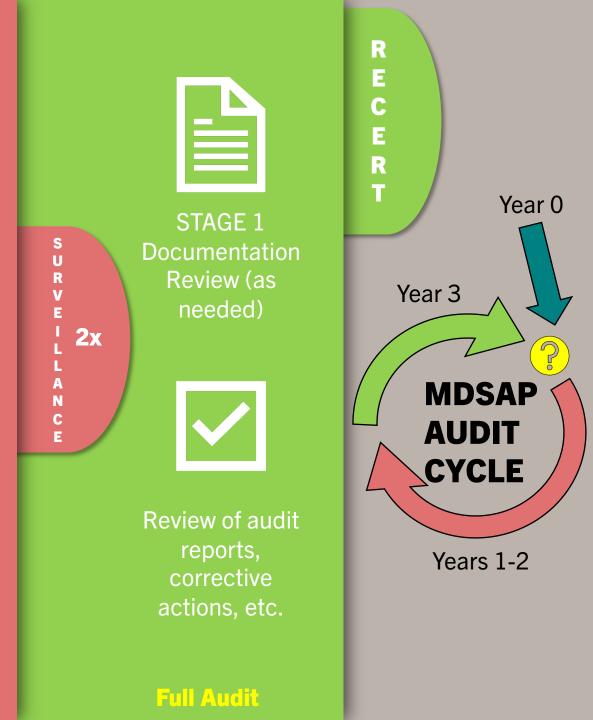
STAGE 1

Documentation

Review (as

needed)

Review of Changes, Mgmt process, MA&I, Registration, Authorization, etc. Partial Audits



Surveillance Audits





Fixed Tasks with some variability

TASKS COVERED



Tasks listed in Audit Time Deter. Procedure

18

PRIMARY PROCESSES

Alternate Coverage

of Design

& Production

Tasks

alla

Audit Time Determination Procedure	Document No.: MDSAP AU P0008.0			08	Page 15 of 17	
Process: Management Task #	Audit Ever Surveilland	-	Audit 1 of 2 Surveillances	to	Not Typically Necessary to Audit During Surveillance	
1					Х	
2					Х	
3					Х	
4					Х	
5	Х					
6			Х			
7					Х	
8					Х	
9	Х					
10	Х					
11	Х					

5.7

Task 1 – QMS Planning, Implementation, Changes and Quality Manual Confirm that quality management system planning is performed to ensure that all required processes are identified, documented, implemented, monitored and maintained in order to conform to the applicable requirements and meet quality objectives.

Verify that changes to the quality management system are managed to maintain the conformity of the quality management system and of the devices produced.

Verify that a quality manual has been documented.

Not required every Surveillance Audit

Required every Surveillance Audit

Task 5 - Extent of Outsourcing

Determine the extent of outsourcing of processes that may affect the conformity of product with specified requirements and verify the proper documentation of controls in the quality management system.

Verify the list of critical suppliers is current and accurate.

Task 6 – Personnel Competency and Training

Confirm the medical device organization has determined the necessary competencies for personnel performing work affecting product quality, provided appropriate training, and made personnel aware of the relevance and importance of their activities on product quality and achievement of the quality objectives.

Ensure records of training and competencies are maintained.

Required 1 of 2 Surveillance Audits

Question

Which is NOT a primary process of the MDSAP Audit Approach?

a. Management
b. Design & Development
c. Production
d. Adverse Event & Advisory
Notice Reporting



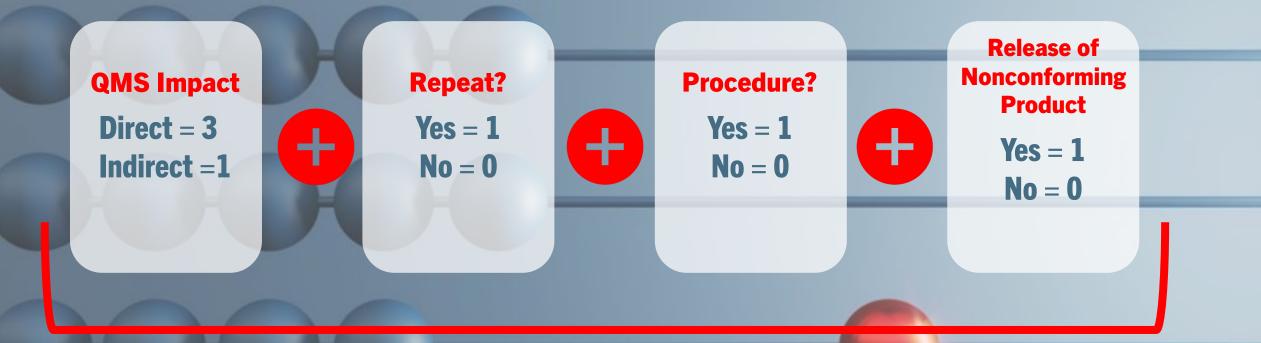
Question

How many years is a full MDSAP Audit Certification Cycle?

a. One (1) b. Two (2) c. Three (3) d. Four (4)



Grading of Nonconformities



NC Grade = Sum of 4 Parameters with Max Grade of 5

Nonconformity number or reference 11

Statement of nonconformity

The procedure for transfer of design and development outputs to manufacturing is not documented.

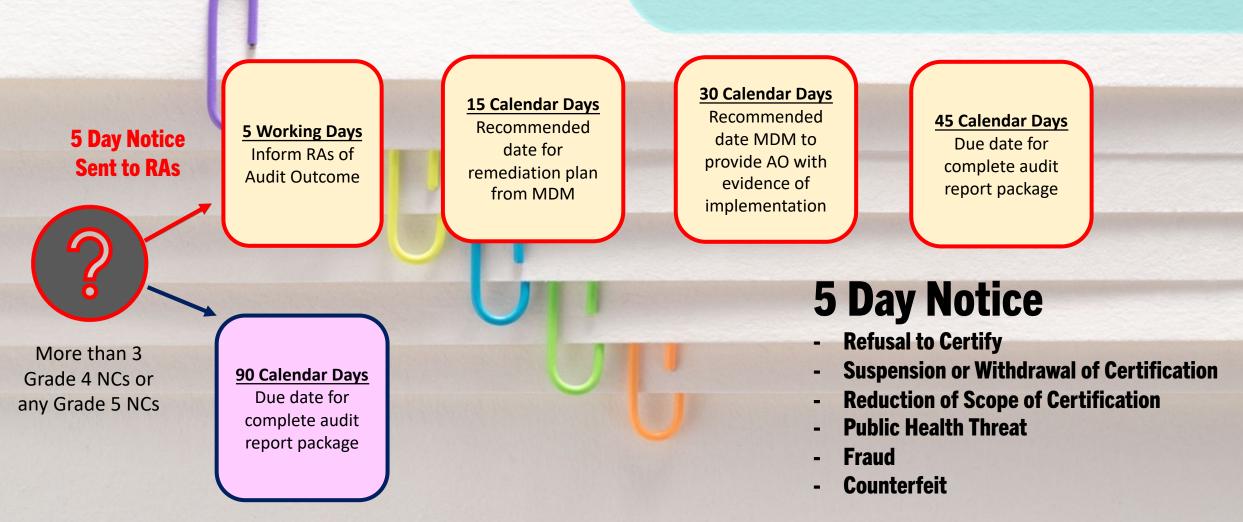
Supporting evidence

The design and development processes are documented in the IVD material design and development procedure (ID# K14N0340 Rev. E). In the procedure, it is mentioned that design transfer from design to manufacturing shall be implemented. However, it is not the procedure.

Unsatisfied requirements			Hide/Show Audit Task and Linkages				
Audit task: process	Design and Developm	ent		•	Task number	04	
QMS Impact	Repeat NC ?	Required Procedure Lacking ?		Nonconforming Products Released ?	MDSAP Grade	ISO 17021 Grade	
○ Indirect	● No	⊖ No		● No	A Majar		
 Direct 	⊖Yes	 Yes 		⊖Yes	4	Major	
The organization detected and properly addressed the nonconformity prior to the audit							
Auditee's response to the nonconformity I. Remediation plan							
Due date for providing the remediation plan 2018-04-28							
Outcome of the investigation of the nonconformity, including its cause analysis							
Cause Analysis:							

The IVD material design and development procedure (ID# K14N0340) only mentioned that design transfer from design to manufacture shall be implemented. The procedure did not specify detailed steps for the design transfer because the Pharmaceutical regulations in Japan require assessment of manufacturability of IVD reagents, which should ensure that the design transfer to manufacture is surely performed without datailad chacific procedure

Post Audit Timeline



Due dates listed are days after audit has ended

Question

What is the highest grade (poorest result) a nonconformity can have?

a. Three (3) b. Four (4) c. Five (5) d. Six (6)



Question

Which meets the criteria for a 5 Day Notice?

a. Twelve (12) Grade 3 NCs b. Six (6) Grade 4 NCs

c. One (1) Grade 5 NC

d. B & C e. All of the Above

5 Day Notice

- Refusal to Certify
- Suspension or Withdrawal of Certification
- Reduction of Scope of Certification
- Public Health Threat
- Fraud
- Counterfeit
- More than Three (3) Grade 4s
- One (1) Grade 5

Questions



MDSAP Assessment Program

Pre-requisite Requirements for Assessors

Education Competence Experience Foundational – communication, critical thinking University Degree -4 years experience Medicine, Science in Medical Devices Functional – or Engineering project/time mgmt or related sector Technical – regulatory, risk assessment skills

Training Requirements for Assessors



40 hours – Quality Management Systems Training (ISO 9001) with 8+ hours dedicated to ISO 13485

32 hours – ISO 17021-1:2015 – Conformity Assessment, country specific requirements, IMDRF documents

8 hours – Risk Management (ISO 14971)



6 hours – Professional Development

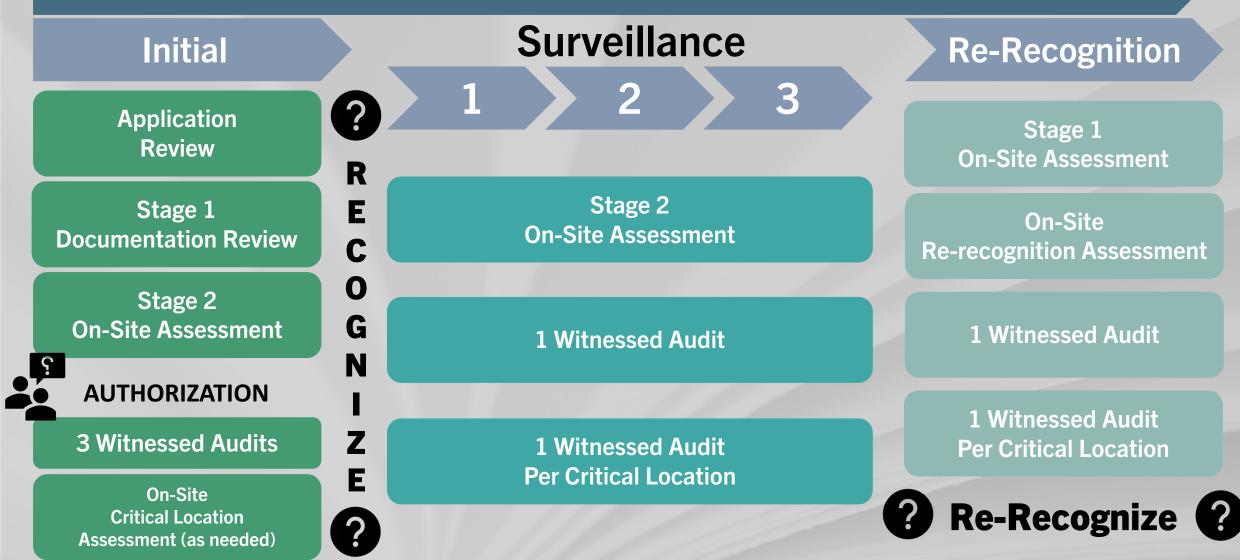
8 hours – annual training on changes to regulatory requirements or training on updates to regulatory requirements

Auditing Organization Journey to Recognition

Assessment Activity	Status
Application reviewed favorably	Application Received
Stage 1 + Stage 2 (+ Critical Locations) + Response to any nonconformity deemed acceptable	<u>Authorized</u> to conduct MDSAP audits (the first 3 to be witnessed)
3 Witnessed Audits + Response to any nonconformity deemed acceptable	<u>Recognized</u>

Recognition Decision

Assessment Program



Focus of Regulatory Authority Assessment of Auditing Organizations

- Management (including Impartiality)
- Measurement, Analysis and Improvement
- Competency Management
- Certification Process
- Information Management



Outsourcing





State of the Program



MDSAP



22,252

Number of MDSAP Audits Conducted (January 2018-October 2023)

5.3 days

Average number of days MDSAP Audits are open

74

Number of Countries where MDSAP Audits occurred

6,891

Number of Active Facilities Participating with MDSAP

MDSAP Participating Facilities



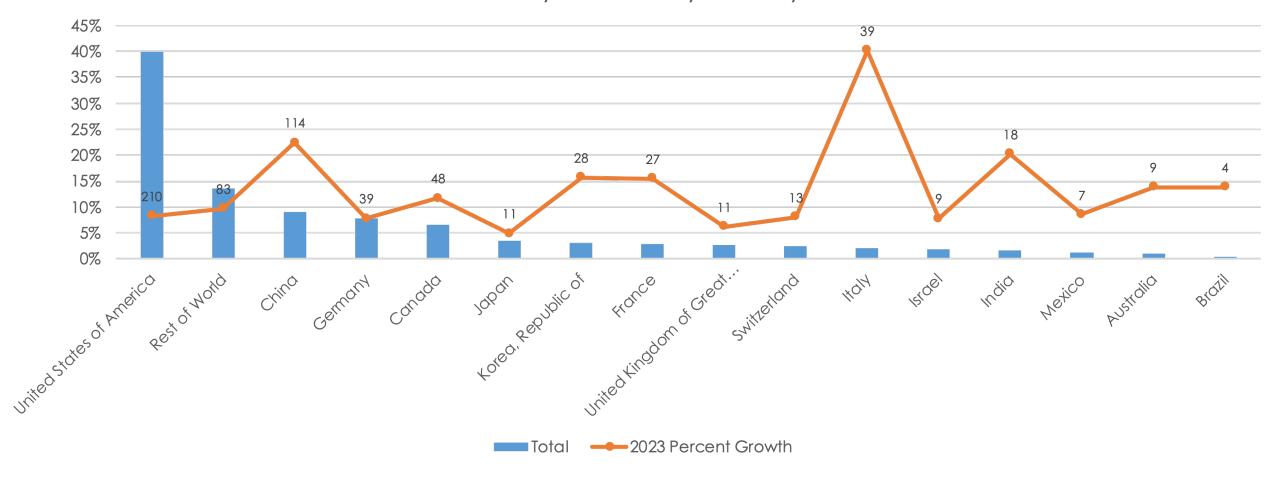
Total Sites by Quarter



MDSAP Sites by Country



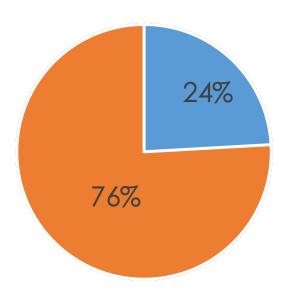
Facility Location By Country

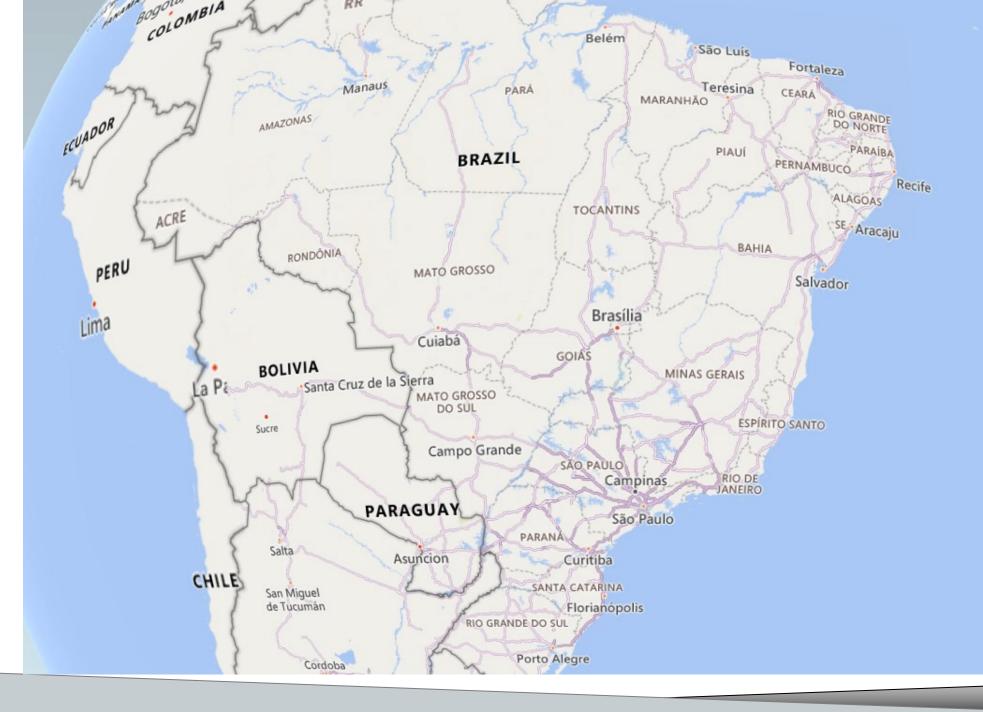


Facilities by Certificate Status

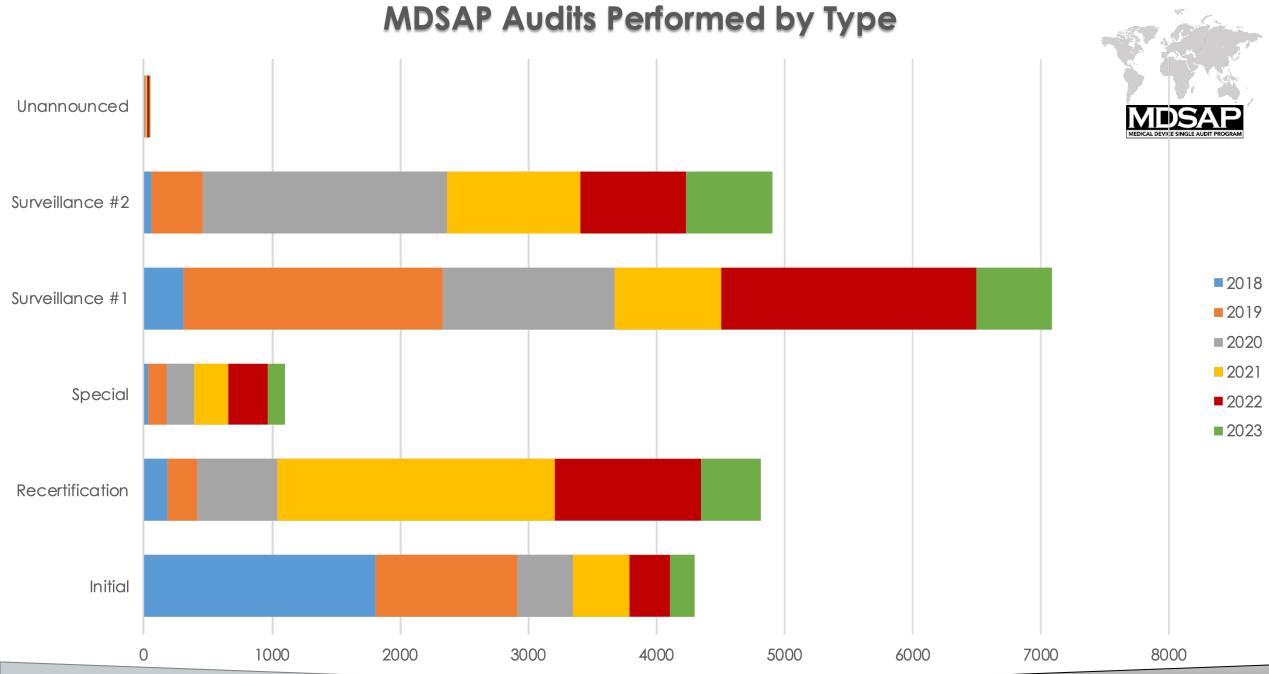
- Facilities: 6,891
 - 6,116 Certificate Holders
 - 2,101 Non-Certificate Holders

Certificate Holders vs Non Certificate Holders





D



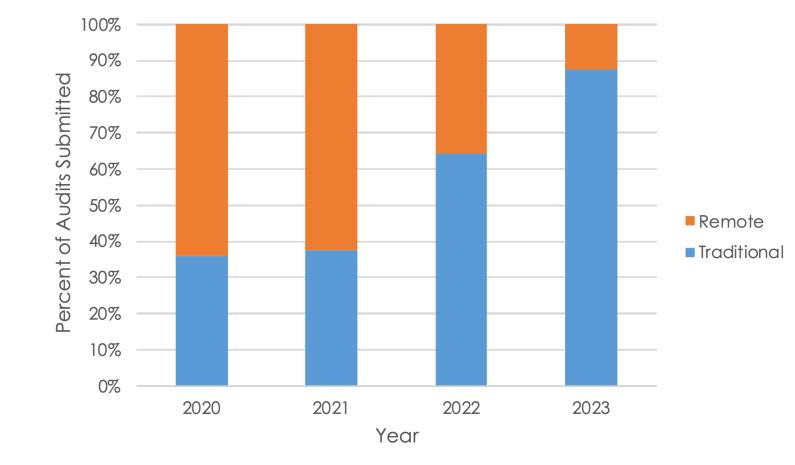
Remote Audits

~45% of Audits

During 2020 through 2022 were performed at least partially remote

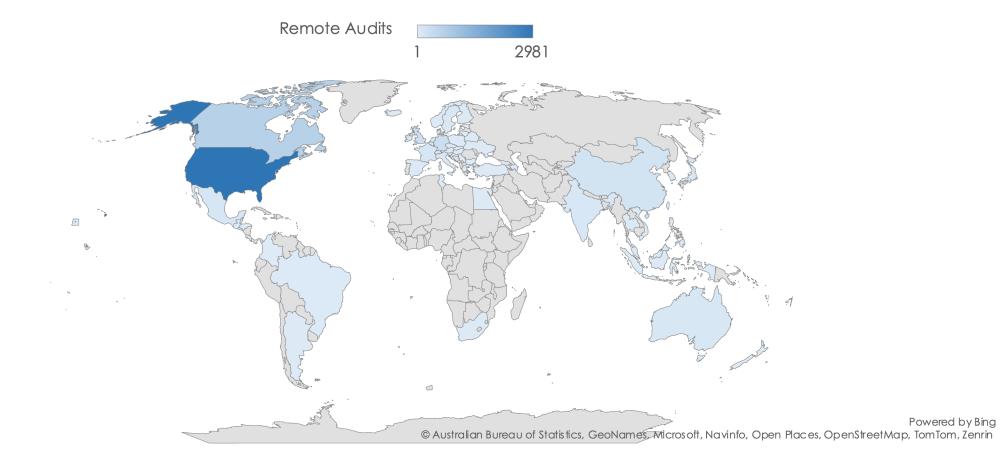
~9% of Audits

Submitted in 2023 were performed at least partially remote



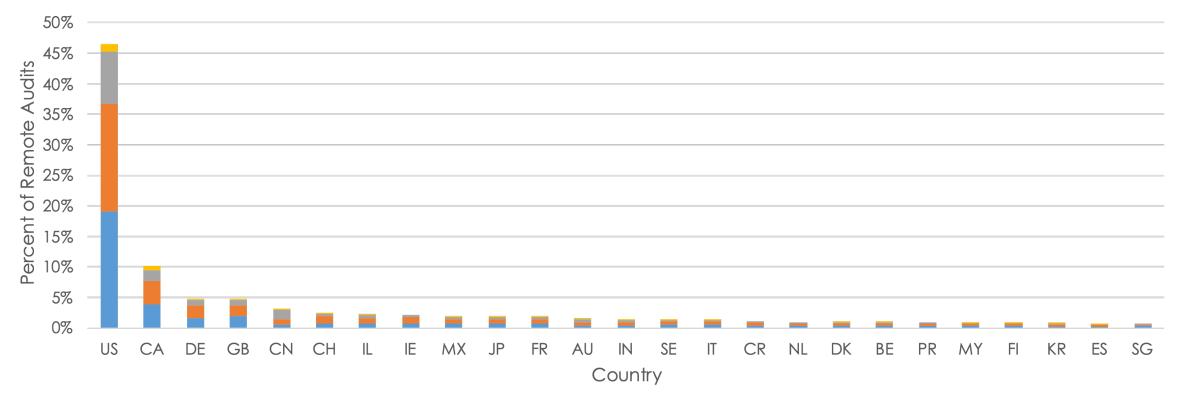
Where do Remote Audits Occur

Where do Remote Audits Occur



Where do Remote Audits Occur Top 25

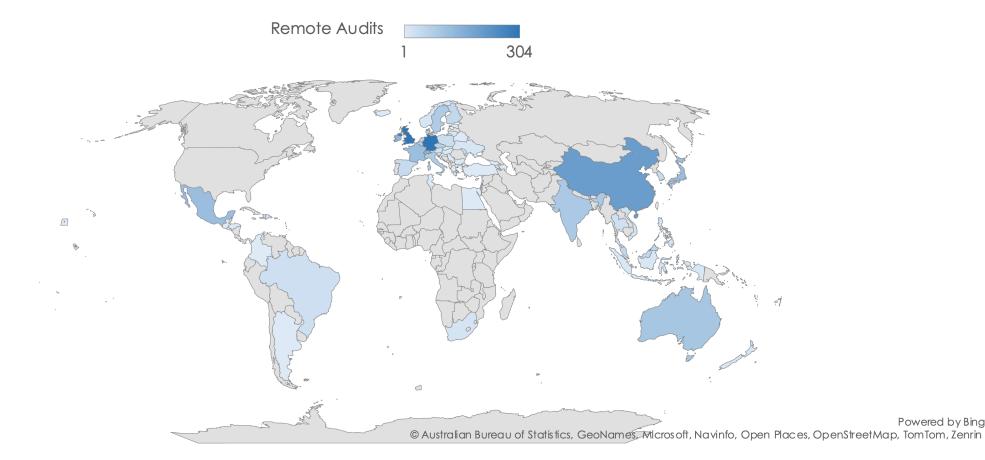
Remote Audits by Country



■ 2020 ■ 2021 ■ 2022 ■ 2023

Where do Remote Audits Occur (excluding US and Canada)

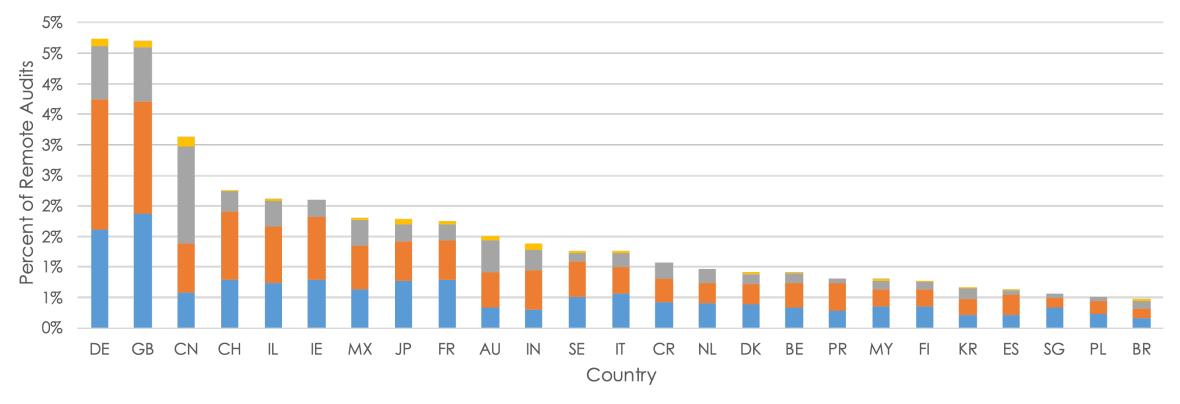
Where do Remote Audits Occur



Where do Remote Audits Occur

Top 25 (excluding US and Canada)

Remote Audits by Country

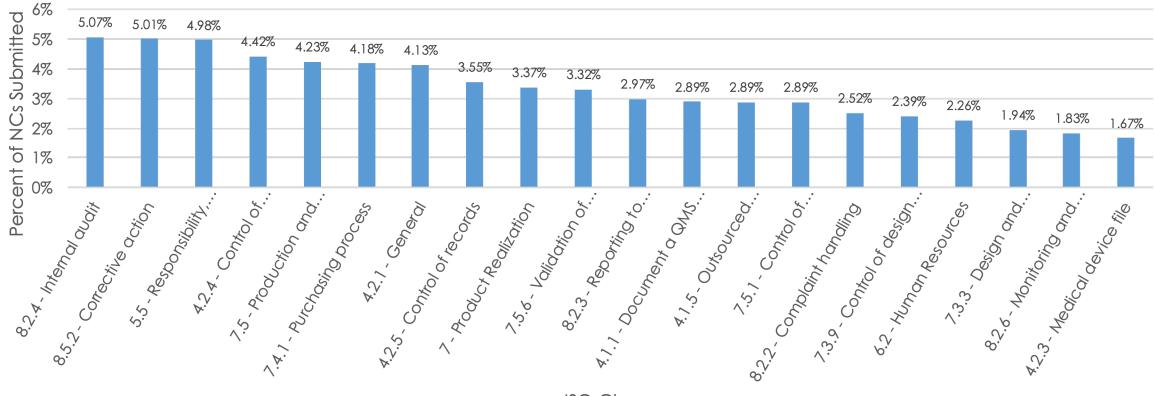


■2020 ■2021 ■2022 ■2023



Number of NCs by Clause

Top 20 NCs by ISO Clause



Questions



MDSAP Future State

MDSAP RAC initiatives for 2023

- Audit, Assessment process updates
- Strengthening the organization

<u>To Enhance Credibility and</u> <u>Stability of the Program</u>

Audit, Assessment process updates



<u>Audits:</u>

Launch Pilot to permit hybrid/remote audit practices in a post-pandemic world (Mar 2023)

AO Assessments:

- Introduce systematic management process of AO assessment, utilizing IT technologies and additional human resources (ongoing)
- Explore new considerations for AO candidates (under development)

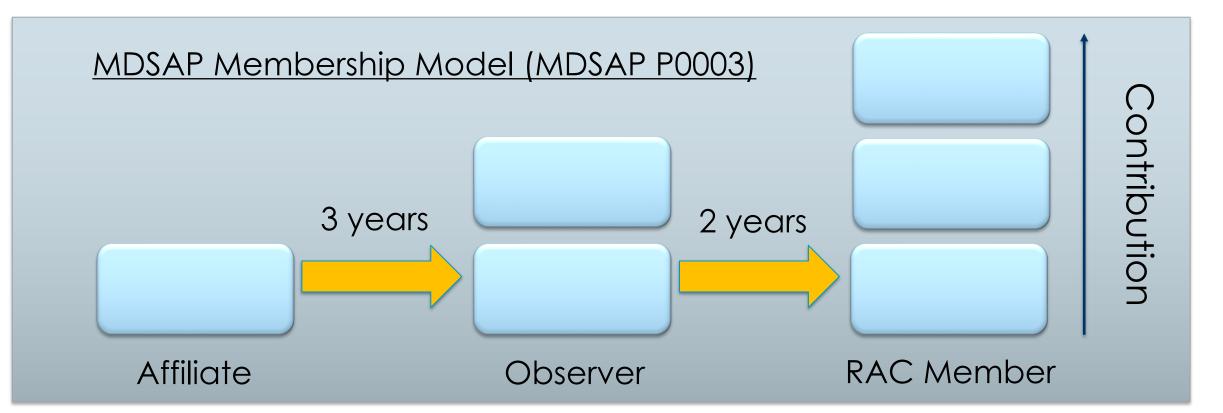
Considerations for AO Candidates



- Consortium is exploring additional considerations for new AO candidates to ensure efficient use of resources, when processing of new candidates resumes
- Considerations will build on foundational documents such as N3 in order to help determine the candidate assessment queue
- Intent is to focus future recognition efforts on candidates with the best chances of being recognized

Strengthening the organization

- Establish MDSAP membership recognition criteria(Jan 2023)
- Addition of Taiwan FDA as an Affiliate Member (Sept 2023)



Recent Efforts of the MDSAP RAC

• Performance Enhancement of MDSAP

For Further Strengthen the Program

Performance Enhancement of MDSAP

Aim:

- Create more transparency about MDSAP performance
- Demonstrate benefits and value of MDSAP participation
- Communicate the effectiveness, continuous improvement and efficiency of the MDSAP
- Highlight the maturity and trust of the MDSAP in its operations
- Partnership approach between the RAC, SMEs and AOs to deliver and report on the performance of the MDSAP



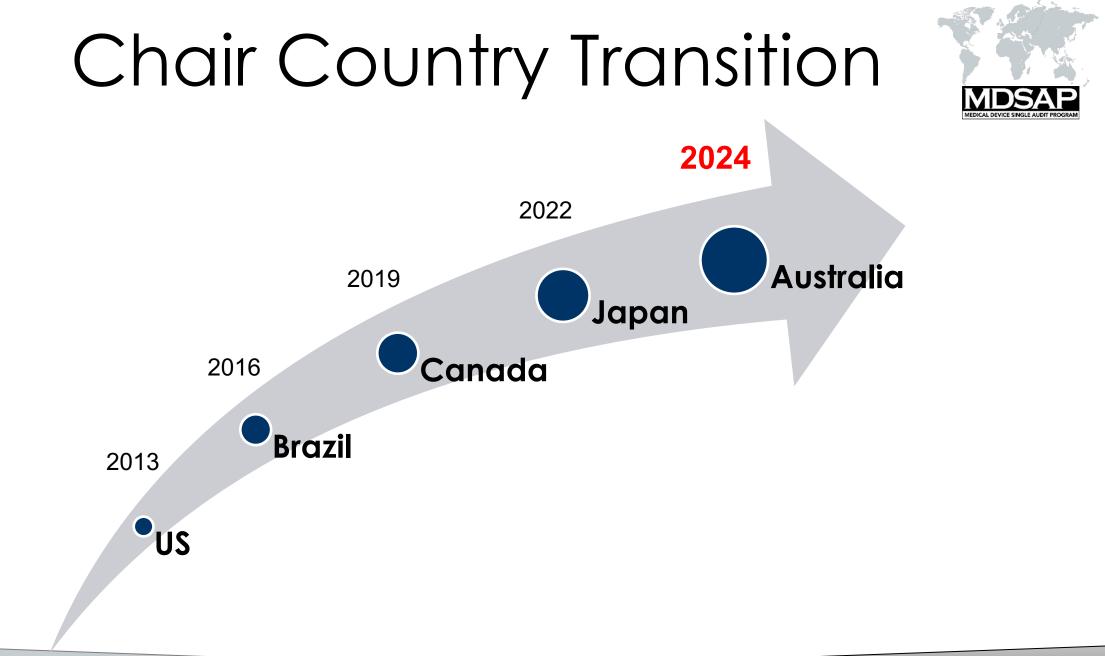
Proposed Elements:

- 1. Increase capacity
- 2. Monitor performance
- 3. Improve timeliness
- 4. Enhance quality
- 5. Rapid identification, escalation and resolution
- 6. Reporting of performance
- 7. Increased engagement



Next steps:

- RAC to continue discussions and considerations
- > RA SMEs to have input to the proposals
- Feedback from AOs to the proposals
- Finalize the list of proposed actions, identify potential timeframes and ways to implement = a plan





Thank you!

<u>Contact information</u> Mail: mdsap-rac-secretariat@pmda.go.jp

Questions



State of the Medical Device Audit Industry

Auditing Organizations Perspective Brasilia, 2023-10-24





Al and Digitalization

State of the Medical Device Audit Industry

2023-10-24 **118**

Al and Digitalization



Incorporating AI into medical devices and AO work



Expanded and new Guidance/regulations



platforms/systems for exchanging of information



Remote/Hybrid Auditing





Challenges

State of the Medical Device Audit Industry

2023-10-24 **120**

Challenges

Global Harmonization

- Navigating multiple schemes is burdensome
- Harmonization when crossover of regulations with medical devices

Resources

- Tapping out on capacity to hire across industry
- Difficulty meeting requirements of N4



Highlights/Benefits

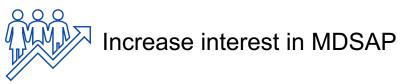
State of the Medical Device Audit Industry

2023-10-24 **122**



Highlights/Benefits

Global Harmonization/Acceptance





Maturing and Stability of Program

Questions



FDA U.S. FOOD & DRUG ADMINISTRATION

Center for Devices and Radiological Health

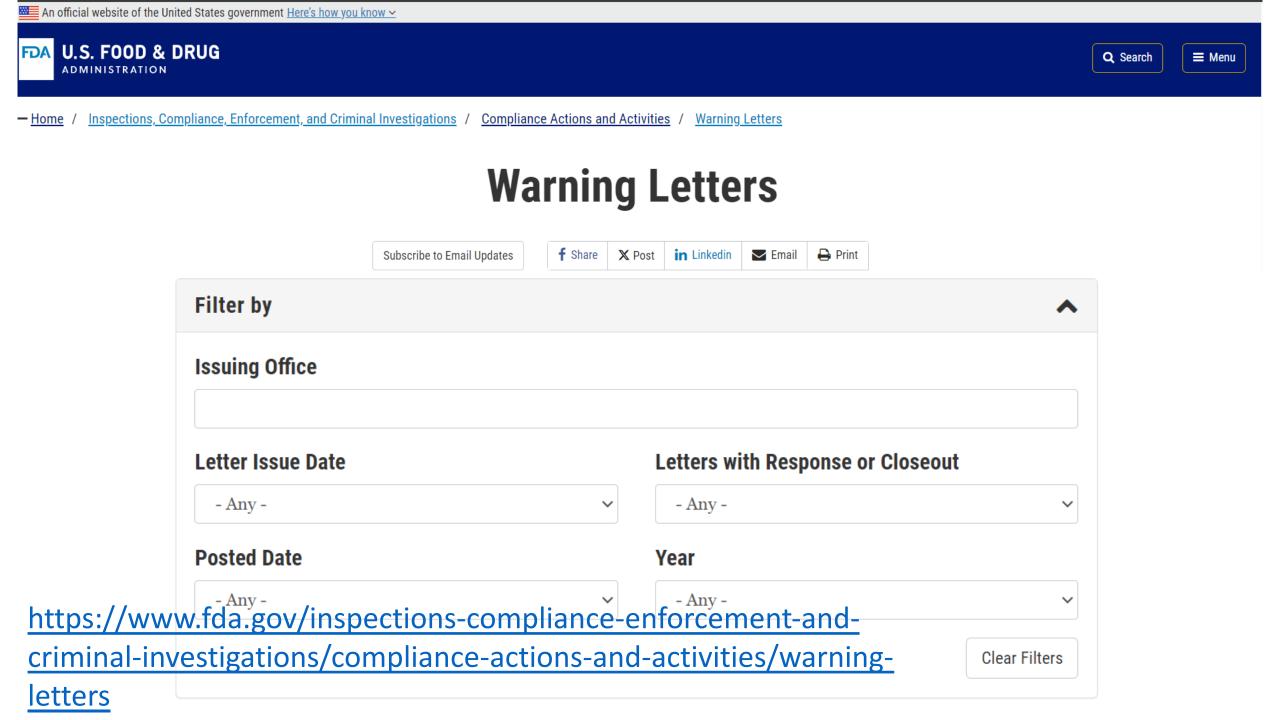
Databases

FDA Data Dashboard https://datadashboard.fda.gov/ora/cd/inspections.htm

← C ⋒ (// datadashboard.fda.gov /ora/cd/inspe	ctions.htm			
👸 Home 📋 DUNS 📋 MDSAP :	5P 📋 SharePoint 📋 Triage 🎽 DC	C 🎽 PHS 🎽 OCD IA 🎽 RIAT SharePoint 🤹 CDRH Docs 👜 Documents 👩 FDA Service Portal 💦 🎽 Other favorites			
DATA DASHBOARD					
Data Dashboard Home Compliance Dashboards 🗸 FSMA Data Search > Resources >					
Home > Compliance Dashboard	Inspections				
Inspections	Compliance Actions				
NEW! Compliance Actions d		ul APIs on the FDA Data Dashboard.			
Caveats:	Imports Summary				
• Certain information in the	Import Refusals	r may have changed since the posting. The datasets are updated weekly and only include final actions. If you purposes or have questions about obtaining other data, please contact the <u>Division of Freedom of Information</u> ooms or inquire about other datasets that would satisfy your needs.			
need to present more rece about what materials may	lance auto Easter a				
+ Show more					

Important Notes:

- Not all inspections are included in the database. Inspections conducted by States, pre-approval inspections, mammography facility inspections, inspections waiting for a final enforcement action, and inspections of nonclinical labs are not included. Inspections of nonclinical labs are available at Nonclinical Laboratories Inspected under Good Laboratory Practices.
- The results show final classifications of <u>No Action Indicated (NAI)</u>, Voluntary Action Indicated (VAI), Official Action Indicated (OAI) for each project area within an inspection.



Weekly

Frequently

as items

become available

Device Advice: Comprehensive Regulatory Assistance / Medical Device Databases Medical Devices ← Home

Medical Device Databases

https://www.fda.gov/medical-devices/device-advice-

comprehensive-regulatory-assistance/medical-device-databases

<u>Devices@FDA</u>	Devices@FDA is a catalog of cleared and approved medical device information from FDA. It includes links to the device summary information, manufacturer, approval date, user instructions, and other consumer information. Devices@FDA searches the following databases: Premarket Notifications (510(k)s) and Premarket Approvals (PMA).		<u>Premarket</u> <u>Notifications</u> (510(k)s)
<u>Premarket Approvals</u> <u>(PMA)</u>	Premarket approval by FDA is the required process of scientific review to ensure the safety and effectiveness of all devices classified as Class III devices. An approved Premarket Approval Application (PMA) is, in effect, a private license granted to the applicant for marketing a particular medical device. This database may be searched by a variety of fields and is updated once a week.	Weekly	<u>Recalls of</u> <u>Devices</u>
<u>Product</u> <u>Classification</u>	This database contains medical device names and associated information developed by the Center. It includes a three letter device product code and	Weekly	

a Device Class that refers to the level of CDRH regulation of a given device.

Medical device manufacturers are required to submit a premarket notification or 510(k) if they intend to introduce a device into commercial distribution for the first time or reintroduce a device that will be significantly changed or modified to the extent that its safety or effectiveness could be affected. This database of releasable 510(k)s can be searched by 510(k) number, applicant, device name or FDA product code. Summaries of safety and effectiveness information is available via the web interface for more recent records. The database is updated once a week.

calls of Medical

1, 2002. Beginning January 3, 2017, the database may also include correction or removal actions initiated by a firm prior to review by the FDA. The status of the action is updated if the FDA identifies a violation and classifies the action as a recall and again when the recall is terminated. FDA recall classification may occur after the firm recalling the medical device product conducts and communicates with its customers about the recall and provides contact information for customers with questions. Therefore, the recall information posting date ("create date") indicates the date FDA classified the recall, it does not necessarily mean that the recall is new. CBER recall information is available here.

This database contains Medical Device Recalls classified since November



Questions?

CDRHInternational@fda.hhs.gov

