Aromatase & Steroidogenesis Assays				
	Microsomal aromatase assay, KGN cells		Validated, and the peer review report completed 12 January 2008.	
	H295R cell-based Steroidogenesis assay		Validation and peer review schedulled by 2nd quesrter 2009. SPSF submitted.	US lead international collaboration study

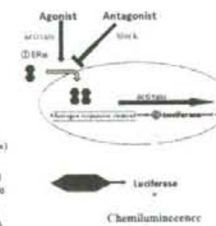
International validation study of ERα STTA antagonist assay using HeLa9930.

CERI

6th VMG-NA
19-21, Nov. 2008
OECD Headquarters, Paris

ERα STTA assay using HeLa9903

hERα-HeLa-9903
(HeLa9903)



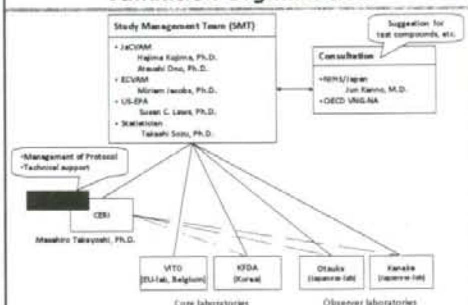
- Developed by Sumitomo Chemical Co.
- Host Cell: HeLa cell line (human cervical tumor cells)
- Inserted construct:
  - ① Human ERα expression vector (full-length)
  - ② Firefly luciferase reporter construct bearing five tandem repeats of a vitellogenin estrogen responsive element (ERE) driven by a mouse metallothionein promoter TATA element
- Expression of other nuclear receptor:
  No functional ERα, ERβ, AR, TRα and TRβ in host cell
- Available from JCRB (NIBIO)

ERα STTA assay using HeLa9903

Draft test guideline for "*the Stably Transfected Human Estrogen Receptor Transcriptional Activation Assay for Detection of Estrogenic Agonist-Activity of Chemicals*", was presented to the WNT20 in April 2008 for approval.

Comment by Peer Review Panel (PRP) included:
The STTA assay can at this point only be used for estrogen agonist testing and further studies would be needed if also **estrogen antagonists** could be tested.

Validation Organization



Study Design and Schedule

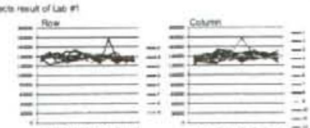
Tasks	Purpose	Note	Schedule
Start chemical distribution from JaCVAM.			2008.5 ~
Start cell culturing at each lab and prepare cell stocks.			2008.6 ~
Task-1	Confirm the edge effects (establish the plate layout)	no edge effects→ use 96-well edge effects are expected →not use edge wells	Data should be submitted until the end of 2008.6.*1 **All data was submitted at 2008.10.**
	Confirm if the test system is properly setup and the participating lab can provide the basic assay performance.	Test un-coded 3~4 chemicals in "Agonist" Assay.	
Task-2	Confirm lab performance for "Antagonist" (ATG) assay (including range finding test, cytotoxicity (cytotox.) test)	Test un-coded 4 chemicals in "Antagonist" Assay.	Data should be submitted until the Mid. of 2008.9 *1 ***Now ongoing!***
Task-3	Test coded chemicals	•Test "anti-estrogenic" activities of coded 12 chemicals.	Data should be submitted until the end of 2008.12. *1

*1 Original schedule

[Task-1] Edge effects

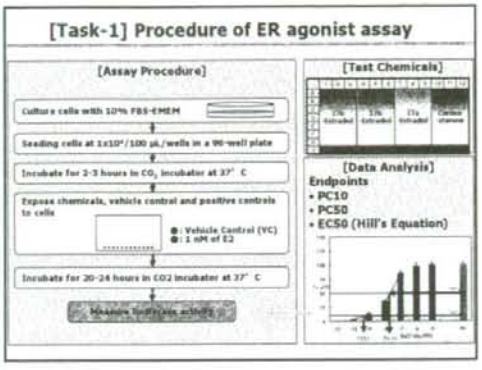
1. Expose 1 nM of E2 to all wells in a 96-well plate
2. Check if the value of coefficient of variation (CV) value among all wells of luminescence intensity is less than 10%.

Edge effects result of Lab #1

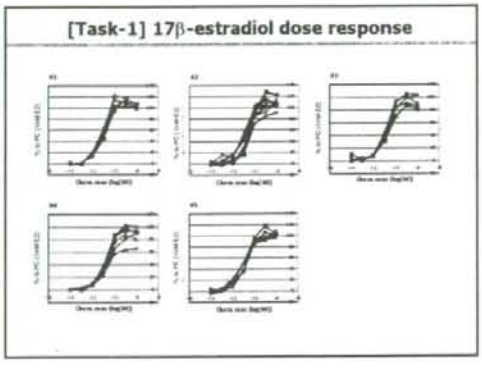


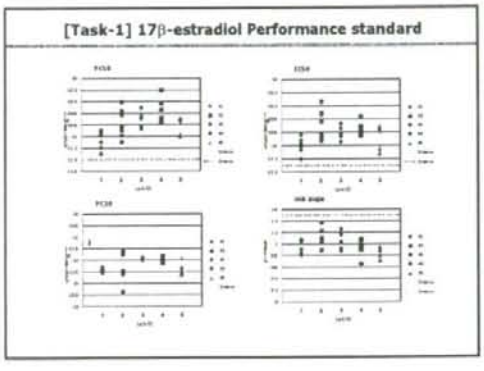
Edge effects result of all participant laboratory

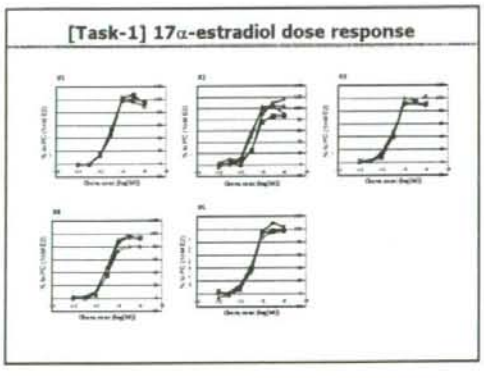
	#1	#2	#3	#4	#5
AVG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SD	[illegible]	[illegible]	[illegible]	21480.2	[illegible]
CV(%)	5.6	4.9	3.7	5.2	7.8

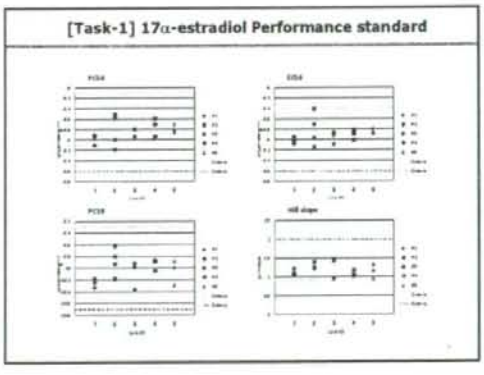

[Task-1] Procedure of ER agonist assay
[Assay Procedure]
Culture cells with 10% FBS-EMEM
Seeding cells at 1x10⁴/100 μL/wells in a 96-well plate
Incubate for 2-3 hours in CO2 incubator at 37° C
Expose chemicals, vehicle control and positive controls to cells
●: Vehicle Control (VC)
●: 1 nM of E2
Incubate for 20-24 hours in CO2 incubator at 37° C
Measure luciferase activity
[Test Chemicals]
[Data Analysis]
Endpoints
• PC10
• PC50
• EC50 (Hill's Equation)


Task-1
[Quality Control and Performance Standard]
Quality Controls
Fold-induction of Positive Control (1 nM of E2) [=(AVG of PC)/(AVG of VC)]
>=4
10% fold-induction of 1 nM E2
> 1 ± 2SD of fold-induction of VC
CV of the raw data triplicates (i.e. luminescence intensity) of the data points that are used for the calculation of PC10
within 20%
Performance Standard
log [PC50 (M)]
log [PC10 (M)]
log [EC50 (M)]
Hill Slope
17beta-Estradiol
-11.4 ~ -10.1
<-11
-11.3 ~ -10.1
0.7 ~ 1.5
17alpha-Estradiol
-9.6 ~ -8.1
-10.7 ~ -9.3
-9.6 ~ -8.4
0.9 ~ 2.0
Corticosterone
*QC and performance criteria is shown in the guideline for agonist assay.

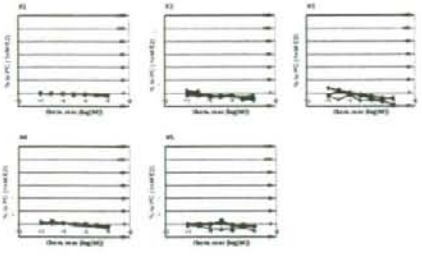

[Task-1] 17β-estradiol dose response


[Task-1] 17β-estradiol Performance standard

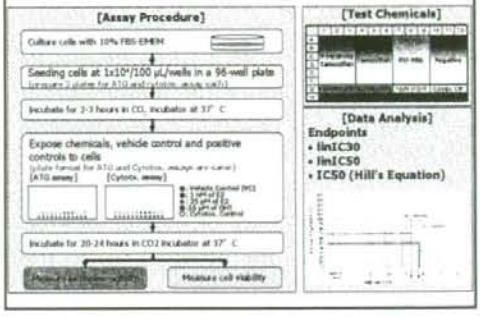

[Task-1] 17α-estradiol dose response


[Task-1] 17α-estradiol Performance standard

[Task-1] Corticosterone dose response



[Task-2] Procedure of ER antagonist assay



Task-2
[Quality Control and Performance Standard]

Quality Controls

Fold-induction of Spike-in Control (25 pM of E2)	> 6
RTA of 1 nM E2	> 100%
RTA of 1 μM OHT	< 16.9%
RTA of 100 μM Digitonin (cytotox. control).	< 0%

RTA: Relative transcriptional Activation to 25 pM E2

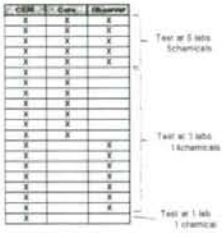
Performance Standard

	log [lin IC30]	log [lin IC50]	log [IC50]
4-Hydroxytamoxifen	-9.86 ~ -8.76	-9.79 ~ -8.28	-9.15 ~ -8.94
Tamoxifen	-7.88 ~ -6.99	-7.48 ~ -6.50	-7.17 ~ -6.77
RU-486	-6.20 ~ -5.32	-5.70 ~ -5.09	- 6.22 ~ -5.32
Negative	-	-	-

•Re-define the performance criteria, if necessary, from Task2 results.

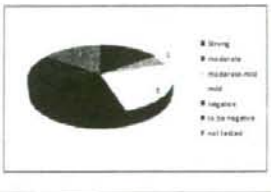
[Task-3] Study design

All lab will participate task-1 and task-2.
Core and Observer lab will test each 12 chemicals (5 chemicals are overlap).
Lead lab (CERI) test all 20 chemicals.

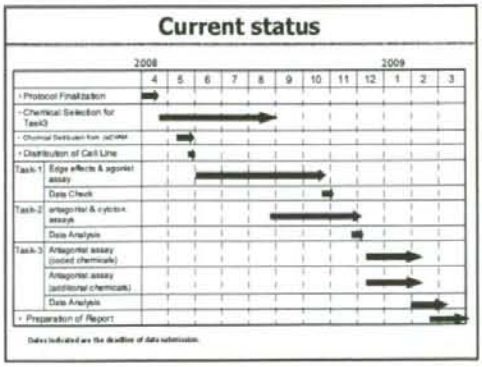


Chemical Selection for Task-3

- Chemicals for Task 3 are selected based on ICCVAM and ECVAM (ReproTect) lists.
- Cytotoxic chemicals (antagonist negatives and positives) are included to strength the sensitivity of the assay.
- "Additional" chemicals are selected from the ER binding (and uterotrophic) assay(s).
- Proposed distribution of Positives and Negatives is as below;



Current status



OECD TEST GUIDELINES PROGRAMME

Standard Project Submission Form

If you require further information please contact the OECD Secretariat
Return completed forms to:
env.tgcontact@oecd.org

PROJECT TITLE

***In vitro* human epidermal model to assess skin irritation: LabCyte EPI-MODEL24**

SUBMITTED BY (Country / European Commission / Secretariat)

Japan(Dr. , Japan National Coordinator for the OECD Test Guidelines Program)

DATE OF SUBMISSION TO THE SECRETARIAT

January, **,2009

DETAILS OF LEAD COUNTRY/CONSORTIUM

Country /Organisation:	Japan
Agency/ministry/Other:	Lead Institute: Japanese Centre for the Validation of Alternative Methods (JaCVAM), National Institute of Health Sciences (NIHS) Supporting Ministry: Ministry of Health, Labour and Welfare (MHLW), Japan
Mail Address:	National Institute of Health Sciences, 1-18-1 Kamiyoga, Setagaya-ku, Tokyo 158-5801, Japan
Phone/fax:	Phone: +81-3-3700-9874 (Kojima) /Fax: +81-3-3700-9874
Email:	h-kojima@nihs.go.jp (Hajime Kojima, Director, JaCVAM, NIHS)

PROJECT OUTCOMES

- ☐ New Test Guideline
- ☒ Revised Test Guideline
- ☐ Deletion of an existing Test Guideline
- ☐ Guidance document
- ☐ Detailed Review Paper
- ☐ Other, please specify below

PROPOSED WORK PLAN and RESOURCE NEEDS:

1. Draft workplan for development of the proposal, including any need to establish Ad Hoc Expert Group and mode of meetings (face-to-face, teleconference; electronic discussion group). Indicate key milestones, including first and subsequent drafts of documents and timing of meetings.

At a meeting, held on April, 2007 at the European Centre for the Validation of Alternative Methods (ECVAM), in Ispar, Italy, the non-Commission members of the ECVAM Scientific Advisory Committee (ESAC) unanimously endorsed the following statement: there is strong evidence that the human reconstituted epidermis (HRE) EPISKIN method is a relevant stand alone test for predicting rabbit skin irritation and a possible replacement for the Draize skin irritation test. Furthermore, the non-Commission members of ESAC endorsed the same statement for other HREs as EpiDerm and SkinEthics at a meeting, held on November, 2008 in Brussels.
The Standard Project Submission Forms (SPSF) for these methods were proposed to the OECD secretary by the EU coordinator. At the OECD expert consultation meeting, held in October, 2008 at BfR in Berlin, Germany, these test methods for a new Test Guideline were investigated by other member countries. We have heard that the next expert consultation meeting will be held in June, 2009 at Washington D.C., USA.

Considering the EPISKIN statement and its protocol, the Japanese Centre for the Validation of Alternative Methods (JaCVAM) and the Japanese Society for Alternatives to Animal Experiments (JSAAE) created a program to validate the usefulness, reproducibility (including intra- and inter-laboratory variability and transferability), and relevance of HREs using a Japanese model (LabCyte EPI-MODEL24) as attached at attachment No. 1 to 3. This model is Japanese HRE and commercially available in Japan as attached at attachment No. 4 and 5. This validation study provided strong evidence that the *in vitro* skin irritation method is reliable. JaCVAM will evaluate this method according to the JaCVAM independent peer review system and propose to publish an additional information on this method in a new draft of the skin irritation Test Guideline.

2. Will additional information, including generation or collection of data, be required? If yes, please describe the anticipated process and timelines.

We will submit a report of this validation study by the 21st meeting of National Coordinators of the Test Guidelines Programme in March, 2009, at Paris, France. We will be able to introduce the independent peer review results on this method to expert consultation members and the OECD secretary in June, 2009.

3. Indicate the estimated overall resource need (time/money) for member country / consortium and Secretariat

We will submit the independent peer review report on this method to the OECD secretary by this summer.

4. Is this proposal intended to replace an existing Test Guideline or lead to the deletion of an existing Test Guideline?

No. These are additional test methods for a draft of the Test Guideline.

ESSENTIAL INFORMATION

In this section, please provide the information required by the Working Group of National Coordinators of the Test Guidelines Programme to assess the suitability of the project for the workplan of the Test Guidelines Programme

1. What is the existing or expected regulatory need/data requirement that will be met by the proposed outcome of the project? Please provide details below or as an attachment.

The proposed Test Guideline will be used to meet the regulatory measures that are necessary to evaluate skin irritation caused by chemicals.

or as attachment No.__

2. How will the work contribute to further international harmonisation of hazard and risk assessment? Please provide details below or as an attachment.

This test method allows the hazard identification of irritant substances to be identified in accordance with UN GHS category 2.

or as attachment No.__

3. How will the proposed project address issues and /or endpoints which are of major human health or environmental concerns? Please provide details below or as an attachment.

This test method will provide a measure of the ability to screen and identify skin irritants.

or as attachment No.__

4. Will the project have general support from OECD member countries or is the outcome relevant for just one or a few member countries / stakeholders? Provide details of the countries and the rationale for this view below.

☒ Many countries ☐ A few countries ☐ Only for the submitting country

The other HREs have already been discussed in many countries as methods to assess hemical safety. We hope this test method will also be investigated with other HREs for a new test guideline at the OECD expert consultation meeting.

5. If the Test Guideline is not intended for general use, indicate if the Test Guideline would be intended for:

☐ Specific (limited) applications such as pesticide usage, or

☐ for specific classes of chemicals (e.g. surfactants) rather than for chemicals in general.

6. If the expected outcome of this proposal is a Test Guideline or a Guidance Document, provide information on the intended use, applicability and limitations of the test method.

The method is rather simple and does not require any sophisticated equipments.

7. Provide supporting information on the validation status (i.e. relevance and reliability) of the method. Principles for validation of test methods for OECD Test Guidelines are described in Guidance Document 34.

Provide justification and rationale for the test, including data.

If there are no or limited data available to support the reliability and relevance of the proposed test, indicate if validation work is included in the project.

If there is no need for validation provide a detailed justification.

JaCVAM and JSAAE managed this validation study and the validation study was conducted in accordance with the OECD Guidance Document 34.

ADDITIONAL INFORMATION

In this section please provide further information to allow the Working Group of National Coordinators of the Test Guidelines Programme to assess the suitability of the project for the workplan of the Test Guidelines Programme

1. If the expected outcome of the project proposal is a Test Guideline and is based on existing, regional or international documents such as guidelines, protocols or guidance material, please provide that information here or as an attachment.

The project plan and standardized operation protocol for the validation study of LabCyte EPI-MODEL24 proposed by the validation management team are provided as attachment No. 1 and No.2. Introduction materials of this HRE model are provided the basic data with LabCyte EPI-MODEL24 according the ECVAM performance standards, morphological characterizations of LabCyte EPI-MODEL24 for an alternative to *in vivo* model and company profile of Japan Tissue Engineering Co., Ltd., who produced LabCyte EPI-MODEL24 as attachment No.3 to 5.

or as attachment No. 1 to 5

2. If Animal Welfare considerations are addressed in the project proposal, provide details below or as an attachment. Explain if the project is aimed at refining, reducing and/or replacing the use of animals.

If the project is not specifically developed for animal welfare purposes, indicate if the animal welfare considerations have been a component of the project proposal.

Indicate if animal welfare considerations are irrelevant to the project, for example for physico-chemical properties.

No.

or as attachment No.__

3. Provide information on expected or possible resource savings in member countries as a result of this project.

The cost of conducting a GLP-compliant this test method in accordance with GLP is similar to conducting a GLP-compliant *in vivo* skin test method with three animals. However, the duration of this test method is considerably shorter than that of the *in vivo* skin test method.

4. If the expected outcome of the proposed project is a Guidance Document or Detailed Review Paper, will it be directly linked to the development of a particular Test Guideline or a series of Test Guidelines?

☐ Yes, it is the initial step in the development of a new or revision of existing Guidelines.

☒ Yes, additional guidance is needed for the most appropriate selection of the Guidelines on the subject.

☐ No, the guidance is on issues related to testing or the development of Test Guidelines in general.

There are _5_ attachments added to this form.

ASSESSMENT OF PROJECT PROPOSAL

(To be completed by all member countries /stakeholders except the submitter)

Country / Organisation:	

Representative: (Preferably NC):	

Taking into account the project information, requested above, does this project meet the needs of the member countries for addition to the workplan of the Test Guidelines Programme

☐ Yes ☐ No ☐ Further information needed

If the response is "No" or "Further information needed", please provide justification:

Remarks as appropriate, including further information needs, if any:

OECD TEST GUIDELINES PROGRAMME

Standard Project Submission Form

If you require further information please contact the OECD Secretariat
Return completed forms to:
env.tgcontact@oecd.org

PROJECT TITLE

Non-Radioisotope version of the Local Lymph Node Assay (LLNA)

SUBMITTED BY (Country / European Commission / Secretariat)

Japan (Dr. , Japan National Coordinator for the OECD Test Guidelines Program)

DATE OF SUBMISSION TO THE SECRETARIAT

January **, 2009

DETAILS OF LEAD COUNTRY/CONSORTIUM

Country /Organisation:	Japan
Agency/ministry/Other:	Lead Institute: Japanese Centre for the Validation of Alternative Methods (JaCVAM), National Institute of Health Sciences (NIHS) Supporting Ministry: Ministry of Health, Labour and Welfare (MHLW), Japan
Mail Address:	National Institute of Health Sciences, 1-18-1 Kamiyoga, Setagaya-ku, Tokyo 158-5801, Japan
Phone/fax:	Phone: +81-3-3700-9874 (Kojima); Fax: +81-3-3700-9874
Email:	h-kojima@nihs.go.jp (Hajime Kojima, Director, JaCVAM, NIHS)

PROJECT OUTCOMES

☐ New Test Guideline	☐ Guidance document
☒ Revised Test Guideline	☐ Detailed Review Paper
☐ Deletion of an existing Test Guideline	☐ Other, please specify below

PROPOSED WORK PLAN and RESOURCE NEEDS:

1. Draft workplan for development of the proposal, including any need to establish Ad Hoc Expert Group and mode of meetings (face-to-face, teleconference; electronic discussion group). Indicate key milestones, including first and subsequent drafts of documents and timing of meetings.

The Japanese Centre for the Validation of Alternative Methods (JaCVAM) and the Japanese Society for Alternatives to Animal Experiments (JSAAE) performed validation studies on the non-radioisotope (RI) version of the Local Lymph Node Assay (LLNA) in order to revise the LLNA that was defined by OECD Test Guideline No.429 from 2005 to 2007. These revised assays are named LLNA-DA and LLNA-BrdU ELISA. The LLNA-DA and the LLNA-BrdU ELISA are based on adenosine troposphere (ATP) content and the incorporation of 5-bromo-2'-deoxyuridine (BrdU) instead of ^{3}H-thymidine uptake. These validation studies provided strong evidence that LLNA-DA and LLNA-BrdU ELISA are reliable methods. To that end, JaCVAM and ICCVAM (Interagency Coordinating Committee on the Validation of Alternative Methods) have each evaluated these methods by a peer review system, and JaCVAM has already recommended regulatory acceptance of LLNA-DA in Japan. We propose to publish additional information on these methods in Test Guideline No.429.

2. Will additional information, including generation or collection of data, be required? If yes, please describe the anticipated process and timelines.

Unfortunately, these Japanese validation studies were performed before the ICCVAM (Interagency Coordinating Committee on the Validation of Alternative Methods) or ECVAM (European Centre for the Validation of Alternative Methods) performance standards were published. Therefore, the results of these validation studies do not fully satisfy these performance standards.

We are submitting the report on the LLNA-DA validation study (see attachments No. 1). Furthermore, We will submit a report on the LLNA-BrdU ELISA validation study and additional information, including the reference chemicals on the ICCVAM and ECVAM performance standards by the leading laboratory, by the 21st Meeting of National Coordinators of the Test Guidelines Programme in March, 2009, in Paris, France.

We have heard that the ICCVAM peer review will also be completed next April. Therefore, we will be able to submit each independent peer review report on these methods to the OECD secretary by this summer.

3. Indicate the estimated overall resource need (time/money) for member country / consortium and Secretariat

We will submit the reports on the validation studies and the ICCVAM and JaCVAM independent peer reviews on these methods to the OECD secretary by this summer.

4. Is this proposal intended to replace an existing Test Guideline or lead to the deletion of an existing Test Guideline?

No. These are additional test methods for an existing Test Guideline.

ESSENTIAL INFORMATION

In this section, please provide the information required by the Working Group of National Coordinators of the Test Guidelines Programme to assess the suitability of the project for the workplan of the Test Guidelines Programme

1. What is the existing or expected regulatory need/data requirement that will be met by the proposed outcome of the project? Please provide details below or as an attachment.

The revised test methods will be used to meet regulatory measures that are necessary to evaluate the skin sensitization of chemicals.

or as attachment No.__

2. How will the work contribute to further international harmonisation of hazard and risk assessment? Please provide details below or as an attachment.

These test methods allow the hazards of skin-sensitizing substances to be identified in accordance with the LLNA classification.

or as attachment No.__

3. How will the proposed project address issues and /or endpoints which are of major human health or environmental concerns? Please provide details below or as an attachment.

These test methods will provide a measure of the ability to screen skin-sensitizing substances.

or as attachment No.__

4. Will the project have general support from OECD member countries or is the outcome relevant for just one or a few member countries / stakeholders? Provide details of the countries and the rationale for this view below.

☒ Many countries ☐ A few countries ☐ Only for the submitting country

OECD Test Guideline No.429 has already been used in many countries to assess chemical

safety. We hope these test methods have also been investigated for a revised Test Guideline.

5. If the Test Guideline is not intended for general use, indicate if the Test Guideline would be intended for:

☐ Specific (limited) applications such as pesticide usage, or

☐ for specific classes of chemicals (e.g. surfactants) rather than for chemicals in general.

6. If the expected outcome of this proposal is a Test Guideline or a Guidance Document, provide information on the intended use, applicability and limitations of the test method.

These methods are rather simple and do not require sophisticated equipment. Specialized facilities for a RI are not necessary.

7. Provide supporting information on the validation status (i.e. relevance and reliability) of the method. Principles for validation of test methods for OECD Test Guidelines are described in Guidance Document 34.

Provide justification and rationale for the test, including data.

If there are no or limited data available to support the reliability and relevance of the proposed test, indicate if validation work is included in the project.

If there is no need for validation provide a detailed justification.

JaCVAM and JSAAE managed these validation studies, and the validation studies were conducted in accordance with OECD Guidance Document 34.

ADDITIONAL INFORMATION

In this section please provide further information to allow the Working Group of National Coordinators of the Test Guidelines Programme to assess the suitability of the project for the workplan of the Test Guidelines Programme

1. If the expected outcome of the project proposal is a Test Guideline and is based on existing, regional or international documents such as guidelines, protocols or guidance material, please provide that information here or as an attachment.

The report of the LLNA-DA validation study proposed by the validation management team is provided as attachment No. 1.

We will submit a report on the LLNA-BrdU ELISA validation study and additional information, including the reference chemicals on the ICCVAM and ECVAM performance standards by the leading laboratory, by the 21st Meeting of National Coordinators of the Test Guidelines Programme in March, 2009, in Paris, France.

or as attachment No. 1

2. If Animal Welfare considerations are addressed in the project proposal, provide details below or as an attachment. Explain if the project is aimed at refining, reducing and/or replacing the use of animals.

If the project is not specifically developed for animal welfare purposes, indicate if the animal welfare considerations have been a component of the project proposal.

Indicate if animal welfare considerations are irrelevant to the project, for example for physico-chemical properties.

According to OECD Test Guideline No. 429, these methods use improved animal protocols that do not require the use of a RI.

or as attachment No.__

3. Provide information on expected or possible resource savings in member countries as a result of this project.

The costs of conducting these test methods following GLP are cheaper than the original method because it is not necessary to have specialized facilities and equipment for a RI.

4. If the expected outcome of the proposed project is a Guidance Document or Detailed Review Paper, will it be directly linked to the development of a particular Test Guideline or a series of Test Guidelines?

☐ Yes, it is the initial step in the development of a new or revision of existing Guidelines.

☒ Yes, additional guidance is needed for the most appropriate selection of the Guidelines on the subject.

☐ No, the guidance is on issues related to testing or the development of Test Guidelines in general.

There are _1_ attachments added to this form.

ASSESSMENT OF PROJECT PROPOSAL

(To be completed by all member countries /stakeholders except the submitter)

Country / Organisation:	

Representative: (Preferably NC):	

Taking into account the project information, requested above, does this project meet the needs of the member countries for addition to the workplan of the Test Guidelines Programme

☐ Yes ☐ No ☐ Further information needed

If the response is "No" or "Further information needed", please provide justification:

Remarks as appropriate, including further information needs, if any:

UPDATED WORK PLAN FOR THE OECD TEST GUIDELINES PROGRAMME (TGP)

大野班 班会議資料
2009年1月15日

SECTION 4: PROJECTS RELATED TO TEST GUIDELINES ON HEALTH EFFECTS

Project 4.29: EDTA Activity: New TG/ Stably Transfected Transcriptional Activation Assay

Lead: Japan
Inclusion in work plan: 2007
Project status and milestones:

- Peer review report available at WNT 19;
- Draft TG circulated to WNT for comments, together with technical issues to be addressed by VMG-non animal, in July 2007;
- Technical issues addressed by VMG-non animal in November 2007;
- STTA sub-committee of the VMG-non animal established in September 2007 to deal with technical issues further addressed at the VMG-non animal in November 2007;
- Revised draft TG circulated in December 2007;
- Provisional approval at WNT20;
- Approval by WNT expected early 2009.

OECD GUIDELINE FOR THE TESTING OF CHEMICALS DRAFT PROPOSAL FOR A NEW GUIDELINE 455

(21/11/2008) **The Stably Transfected Human Estrogen Receptor-α Transcriptional Activation Assay for Detection of Estrogenic Agonist-Activity of Chemicals**

Project 4.34: EDTA Activity - New TG for a stably Transfected Transcriptional Activation (STTA) Assay for the detection of anti-estrogenic activity of chemicals

Lead: Japan
Inclusion in work plan:2008
Project status and milestones:

- Validation study expected to be completed early 2009;
- Validation report expected to be available by March 2009, and followed by a validation peer review;
- Draft TG expected to be available in 2009.

Project 4.30: EDTA Activity - New TG: Stably Transfected Transcriptional Activation (STTA) Assay for the Detection of Estrogen Receptors Agonists and Antagonists (LUMI-CELL® ER Assay)

Lead: United States
Inclusion in work plan: 2008
Project status and milestones:

- Completion of the validation study expected in February 2009;
- BRD available for public comments expected in Summer 2009;
- Peer review panel meeting expected to be convened in fall 2009.

Project 4.36: New TG: Comet Assay in Genotoxicity Testing

Lead: Japan

Inclusion in work plan: 2008

Project status and milestones:

- Final validation study expected in autumn 2010;
- Submission of validation results and draft TG expected early 2011.

現在班員および協力研究者が関係している他の *in vitro*試験ガイドライン

Project 4.5: New TG for *in vitro* SHE Cell Transformation Assay

Project 4.7: New TG (487) *In vitro* Micronucleus Test

Project 4.26: Cell Transformation Assay using Balb/c 3T3 cell line

Project 4.35: New TG for an *In Vitro* Skin Irritation Assay

Project 4.37: New TG: Bovine Corneal Opacity and Permeability Test Method: An In Vitro Method for Identifying Ocular Corrosives and Severe Irritants

Project 4.38: New TG: Isolated Chicken Eye Test Method: An In Vitro Method for Identifying Ocular Corrosives and Severe Irritants

新たに本年提出予定のSPSF

- **Non-Radioisotope version of the Local Lymph Node Assay (LLNA)**
- ***In vitro* human epidermal model to assess skin irritation: LabCyte EPI-MODEL24**

研究成果の刊行に関する一覧表

書籍

著者氏名	論文タイトル名	書籍全体の編集者名	書　籍　名	出版社名	出版地	出版年	ページ
小島肇夫	in vivo経皮吸収試験法		最新・経皮吸収剤～開発と基礎から申請のポイントまで～	株式会社情報機構	東京	2008	95-103
小島肇夫	in vitro経皮吸収試験法		最新・経皮吸収剤～開発と基礎から申請のポイントまで～	株式会社情報機構	東京	2008	104-113

雑誌

発表者氏名	論文タイトル名	発表誌名	巻号	ページ	出版年
大野泰雄	薬学研究における動物実験代替法研究の重要性とその問題点	薬学雑誌	128（5）	735-740	2008
小島肇夫	安全性評価と動物実験代替法の現状	薬学雑誌	128（5）	747-752	2008
小島肇夫	動物実験の３Rsにおける国内外の動向	ファルマシア	44(9)	857-861	2008
小島肇夫	REACH対応に必要な動物実験代替法の現状	COSMETIC STAGE	2(5)	1-4	2008
小島肇夫	Interlaboratory validation of the modified murine local lymph node assay based on adenosine triphosphate measurement	Journal of Pharmacological and Toxicological Methods	58	16-26	2008
小島肇夫	An *in vitro* evaluation methods to test ocular irriation using a human corneal epithelium model	Altern. Animal Test EXperiment	13(2)	83-90	2008
小島肇	動物実験代替法に関する2008年の国際動向	Fragrance Journal	2009-1	65-69	2009
小島肇夫	動物実験代替法の現状と展望	J.Environ Dermatol Cutan Allergol	3(1)	1-6	2009
小島肇夫	動物実験の３Rsにおける国内外の動向	城西大学生命科学研究センター報告	7	37-50	2009