# Summary of QoL/PRO assessment in JCOG studies

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#### JCOG trials between 1990-2004

Group	Rand	domize pł	nase III (	(44)	Non randomized and/or phase I, II (72)
Lung medical	J9104	J9106	J9202	J9511	J9008 J9009 J9011 J9110 J9111 J9201 J9302 J9306
(38 trials)	J9702	J9811	J9812	J0104	J9405 J9406 J9408 J9409 J9413 J9504 J9507 J9509
	J0202	J0207	J0301		J9510 J9512 J9515 J9601 J9605 J9606 J9608 J9704
					J9706 J9807 J0402
Lung Sx (9)	J9209	J9304	J9403		J9101 J9805 J9806 J0201 J0204 J9805
GI (11)	J9205	J9912	J0106		J9001 J9207 J9410 J9603 J9703 J9906 J9207 J0407
Gastric Sx (10)	J9206-1	J9206-2	J9501	J9502	J0001 J0210 J0302 J0405
	J9701	J0110			
Esophageal (6)	J9204	J9907	J0303		J9407 J9516 J9708
Colorectal (3)	J0205	J0212	J0404		
Breast (12)	J9114	J9208	J9401	J9404	J9107 J9113 J9503 J9602 J9803 J0306
	J9802	J0111			
Lymphoma (19)	J9002	J9301	J9801	J9809	J9004 J9005 J9007 J9109 J9203 J9303 J9305 J9402
	J0203				J9505 J9506 J9508 J9705 J0112 J0406
Gynecology (3)	J0102				J9412 J0206
Urology (2)	J0209	J0401			
Bone & STS (1)					J0304
Radiation (1)					J0403
Brain (1)	J0305				https://www.icrweb.jp

#### JCOG trials between 1990-2004

1415			<u> </u>								
Rando	mize pha	se III ( <b>1</b>	<b>9</b> /44)		Non r	andomiz	ed and/	or phase	e I, II (	<b>5</b> /72)	
J9104	J9106	J9202	J9511	J9008	J9009	J9011	J9110	J9111	J9201	J9302	J9306
J9702	J9811	J9812	J0104	J9405	J9406	J9408	J9409	J9413	J9504	J9507	J9509
J0202	J0207	J0301		J9510	J9512	J9515	J9601	J9605	J9606	J9608	J9704
				J9706	J9807	J0402					
J9209	J9304	J9403		J9101	J9805	J9806	J0201	J0204	J9805		
J9205	J9912	J0106		J9001	J9207	J9410	J9603	J9703	J9906	J9207	J0407
J9206-1	J9206-2	J9501	J9502	J0001	J0210	J0302	J0405				
J9701	J0110										
J9204	J9907	J0303		J9407	J9516	J9708					
J0205	J0212	J0404									
J9114	J9208	J9401	J9404	J9107	J9113	J9503	J9602	J9803	J0306		
J9802	J0111										
J9002	J9301	J9801	J9809	J9004	J9005	J9007	J9109	J9203	J9303	J9305	J9402
J0203				J9505	J9506	J9508	J9705	J0112	J0406		
J0102				J9412	J0206						
J0209	J0401										
				J0304							
				J0403							
J0305											
	Rando J9104 J9702 J0202  J9205 J9206-1 J9701 J9204 J0205 J9114 J9802 J9002 J0203 J0102 J0209	Randomize phase  J9104 J9106 J9702 J9811 J0202 J0207  J9209 J9304 J9205 J9912 J9206-1 J9206-2 J9701 J0110 J9204 J9907 J0205 J0212 J9114 J9208 J9802 J0111 J9002 J9301 J0203 J0102 J0209 J0401	Randomize phase III (1  J9104 J9106 J9202  J9702 J9811 J9812  J0202 J0207 J0301  J9209 J9304 J9403  J9205 J9912 J0106  J9206-1 J9206-2 J9501  J9701 J0110  J9204 J9907 J0303  J0205 J0212 J0404  J9114 J9208 J9401  J9802 J0111  J9002 J9301 J9801  J0203  J0102  J0209 J0401	Randomize phase III (19/44)         J9104       J9106       J9202       J9511         J9702       J9811       J9812       J0104         J0202       J0207       J0301       Fraction of the property of the propert	Randomize phase III (19/44)         J9104 J9106 J9202 J9511 J9008         J9702 J9811 J9812 J0104 J9405         J0202 J0207 J0301       J9510 J9706         J9209 J9304 J9403 J9403 J9901         J9205 J9912 J0106 J9901         J9206-1 J9206-2 J9501 J9502 J0001 J9701 J0110         J9204 J9907 J0303 J9502 J0001         J9404 J9907 J0303 J9404 J9907         J9802 J0111         J9802 J9301 J9801 J9809 J9004         J0203 J9301 J9801 J9809 J9505         J0209 J0401         J0209 J0401	Randomize phase III (19/44)       Non r         J9104       J9106       J9202       J9511       J9008       J9009         J9702       J9811       J9812       J0104       J9405       J9406         J0202       J0207       J0301       J9510       J9512       J9706       J9807         J9209       J9304       J9403       J9101       J9805       J9907       J9805       J9901       J9207         J9206-1       J9206-2       J9501       J9502       J0001       J0210         J9701       J0110       J9404       J9407       J9516         J0205       J0212       J0404       J9404       J9107       J9113         J9802       J0111       J9809       J9004       J9005         J0203       J9301       J9801       J9809       J9004       J9005         J0209       J0401       J0304       J0304       J0304	Randomize phase III (19/44)  J9104 J9106 J9202 J9511 J9008 J9009 J9011  J9702 J9811 J9812 J0104 J9405 J9406 J9408  J0202 J0207 J0301 J9510 J9512 J9515  J9706 J9807 J0402  J9209 J9304 J9403 J9101 J9805 J9806  J9205 J9912 J0106 J9001 J9207 J9410  J9206-1 J9206-2 J9501 J9502 J0001 J0210 J0302  J9701 J0110  J9204 J9907 J0303 J9407 J9516 J9708  J0205 J0212 J0404  J9114 J9208 J9401 J9404 J9107 J9113 J9503  J9802 J0111  J9002 J9301 J9801 J9809 J9004 J9005 J9007  J0203 J9402 J9404  J0304  J0403	Randomize phase III (19/44)  J9104 J9106 J9202 J9511 J9008 J9009 J9011 J9110  J9702 J9811 J9812 J0104 J9405 J9406 J9408 J9409  J0202 J0207 J0301 J9510 J9512 J9515 J9601  J9706 J9807 J0402  J9209 J9304 J9403 J9101 J9805 J9806 J0201  J9205 J9912 J0106 J9001 J9207 J9410 J9603  J9206-1 J9206-2 J9501 J9502 J0001 J0210 J0302 J0405  J9701 J0110  J9204 J9907 J0303 J9407 J9516 J9708  J0205 J0212 J0404  J9114 J9208 J9401 J9404 J9107 J9113 J9503 J9602  J9802 J0111  J9002 J9301 J9801 J9809 J9004 J9005 J9007 J9109  J0203 J9505 J9506 J9508 J9705  J0102 J9412 J0206  J0304 J0403	Non randomized and/or phase   J9104   J9106   J9202   J9511   J9008   J9009   J9011   J9110   J9111   J9702   J9811   J9812   J0104   J9405   J9406   J9408   J9409   J9413   J0202   J0207   J0301   J9510   J9512   J9515   J9601   J9605   J9706   J9807   J0402   J9209   J9304   J9403   J9101   J9805   J9806   J0201   J0204   J9205   J9912   J0106   J9001   J9207   J9410   J9603   J9703   J9206-1   J9206-2   J9501   J9502   J0001   J0210   J0302   J0405   J9701   J0110   J9204   J9907   J0303   J9407   J9516   J9708   J9907   J0303   J9407   J9516   J9708   J9907   J0303   J9802   J0111   J9002   J9301   J9801   J9809   J9004   J9005   J9007   J9109   J9203   J0203   J9505   J9506   J9508   J9705   J0112   J0209   J0401   J0304   J0403   J0404   J0403   J0403   J0404   J0	Randomize phase III (19/44)       Non randomized and/or phase I, II (19/44)         J9104 J9106 J9202 J9511       J9908 J9909 J9911 J9110 J9111 J9201         J9702 J9811 J9812 J0104       J9405 J9406 J9408 J9409 J9413 J9504         J9202 J0207 J0301       J9510 J9512 J9515 J9601 J9605 J9606         J9209 J9304 J9403       J9101 J9805 J9806 J0201 J0204 J9805         J9205 J9912 J0106       J9901 J9207 J9410 J9603 J9703 J9906         J9206-1 J9206-2 J9501 J9502 J0001 J0210 J0200 J0302 J0405         J9204 J9907 J0303       J9407 J9516 J9708         J0205 J0212 J0404         J9902 J0401         J9902 J9301 J9801 J9809 J9004 J9005 J9503 J9602 J9803 J0306         J9902 J9301 J9801 J9809 J9904 J9005 J9506 J9508 J9705 J0112 J0406         J0209 J0401         J0304 J0304          J0304 J0304 J0304 J0304 J0306 J0304           J0304 J0304 J0304 J0306 J0304 J0306 J0304 J0306 J03	Non randomized and/or phase I, II (5/72)   19104   19106   19202   19511   19008   19009   19011   19110   19111   19201   19302     19702   19811   19812   19104   19405   19406   19408   19409   19413   19504   19507     19202   19207   19301   19510   19510   19510   19515   19601   19605   19606   19608     19209   19304   19403   19101   19805   19806   10201   10204   19805     19205   19912   10106   19901   19207   19410   19603   19703   19906   19207     19206-1   19206-2   19501   19502   10201   10210   10302   10405     19204   19907   10303   19407   19516   19708     19205   19212   10404   19404   19107   19113   19503   19602   19803   19303   19305     19802   19111   19908   19801   19809   19904   19005   19508   19705   19112   10406     19002   19301   19801   19809   19506   19508   19505   19506   19508   19705   10112   10406     19002   19004   19005   19506   19508   19705   10112   10406     19002   19004   19005   19506   19508   19705   10112   10406     19003   19004   19005   19508   19705   10112   10406     19004   19005   19506   19508   19705   10112   10406     19005   19006   19006   19006   19006   19006   19006   19006     19006   19006   19006   19006   19006   19006   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営利目的での使用はご遠慮ください

## **QoL** assessment in lung cancer

Study Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment outcome
J9104 Limited-disease	1991-1995	231	CRT	rIII	Modified EORTC QLQ-C30	Group (unknown)	Terminated
J9106 Limited-disease	1991-1995	227	Cx	rIII	Modified EORTC QLQ-C30	Group (unknown)	Terminated
J9202 Limited-disease	1992-1994	320	CRT	rIII	Modified EORTC QLQ-C30, Face scale	Group (unknown)	Planned but not performed?
J9511 Metastatic	1995-1999	154	Cx	rIII	Modified EORTC QLQ-C30	Group (unknown)	Terminated
J9515 Metastatic	1996-1999	105	Cx	rII	Modified EORTC QLQ-C30	Group (unknown)	Unknown
J9702 Metastatic	1998-2004	220	Cx	rIII	Palliation score (disease-specific symptoms score by MRC lung cancer working party and treatment related symptoms by FLIC)	Group (Dr. Kunitoh)	Completed
J0104 Metastatic	2002-2003	130	Сх	rIII	FACT-L (Functional Assessment of Cancer Therapy - Lung )	Exclusive coordinator (Dr. Ando)	Completed
J0207 Metastatic	2003-2006	126	Cx	rIII	FACT-L	Exclusive coordinator (Dr. Ando)	Completed

- No completed trials exist among trials started before 1998.
- Questionnaires were not returned directly to the QoL study coordinator except for J0104 and J0207.

### QoL assessment in GI cancer

Study ID	Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment outcome
J9205	Gastric Metastatic	1992-1997	280	Cx	rIII	Unknown	Unknown	Terminated
J9501	Gastric Curative	1995-2001	523	Sx	rIII	Researcher's Original	Group (Dr. Sasako)	Completed
J9502	Gastric Curative	1995-2003	167	Sx	rIII	Researcher's Original	Group (Dr. Sasako)	Completed
J0212	Rectal Curative	2003-2010	701	Sx	rIII	IIEF (International Index of Erectile Function)	Group (Dr. Saito)	Completed

- QoL assessment was completed in 3 (75%) out of 4 trials.
- In J9501 and J9502, used questionnaire was not validated, was not returned directly to the QoL study coordinator.
- QoL coordinator sent reminders at each evaluation point in all completed trials.

## QoL assessment in lymphoma

Study ID	Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment outcome
J9002	Non HL	1991-1995	447	Cx	rIII	Unknown	Unknown	Terminated
J9203	Non-ATL	1992-1995	45	Cx	II	Researcher Original	Unknown	Terminated
J9301	MM	1993-1998	210	Сх	rIII	Researcher Original	Unknown	Terminated

- No completed trials in QoL assessment.
- Used questionnaire was not validated and not returned directly to the QoL study coordinator.



## **QoL** assessment in Urology

Study ID	Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment Outcome
J0209	Bladder Curative	2003-2009	130	Sx/Cx	rIII	FACT-BL*1	Group (Dr. Kakei)	Completed
J0401	Prostate Curative	2004-2011	210	RT/ hormo nal	rIII	UCLA-PCI*2, SF-36*3	Group (Dr. Hinotsu)	Completed

- All QoL assessment was completed.
- Used questionnaire was validated and collected directly to the QoL study coordinator.
- QoL results have <u>NOT</u> been presented and published.

<sup>\*1</sup> Functional Assessment of Cancer Therapy - Bladder cancer: http://www.facit.org/FACITOrg/Questionnaires

<sup>\*2</sup> UCLA Prostate Cancer Index: Litwin, M. Medical care (1998): 1002-1012.

<sup>\*3</sup> MOS 36-Item Short-Form Health Survey: https://www.sf-36.jp/qol/sf36.html

#### QoL assessment in breast cancer

Study ID	Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment outcome
J9113	Metastatic	1992-1995	28	Сх	I/II	Unknown	Unknown	Terminated
J9114	Metastatic	1992-1996	455	Cx	II	Unknown	Unknown	<b>Terminated</b>
J9208	Curative	1993-1998	97	Сх	rIII	Researcher's Original	Unknown	Terminated
J9401	Curative	1994-1999	129	Cx	rIII	Unknown	Unknown	Terminated
J9404	Curative	1994-1999	169	Сх	rIII	Kurihara's QoL questionaire (QOL-ACD)*1	Unknown	Terminated
J9503	Metastatic	1995-1997	18	Cx	II	Unknown	Unknown	<b>Terminated</b>
J9802 (9803)	Metastatic	1999-2003	441	Сх	rIII	FACT-B*2, FACT-Taxane*3	JCOG QoL Unit	<u>Completed</u>

All but J9802 was not completed.



<sup>\*1</sup> Kurihara M et al., Development of Quality of Life Questionnaire in Japan: quality of life assessment of cancer patients receiving chemotherapy. Psycho-Oncology. 1999;8(4):355-63. (Quality of Life Questionnaire for Cancer Patients Treated with Anticancer Drugs)

<sup>\*2</sup> Functional Assessment of Cancer Therapy – Breast cancer: http://www.facit.org/FACITOrg/Questionnaires

<sup>\*3</sup> Functional Assessment of Cancer Therapy – Taxane: http://www.facit.org/FACITOrg/Questionnaires 営利目的での使用はご遠慮ください

#### Questionnaire used for the evaluation of daily lives

#### Please check the most appropriate answer

- 1. Are you engaged in work now? /現在お仕事はしていますか?
- 2. Has your weight changed? / 体重の変化は?
- 3. Do you have an appetite? / 食欲は?
- 4. How are you sleeping? / 睡眠は?
- 5. What do people around you (colleague, family) say and how do they look at you? / まわりの人(家族、職場の同僚など) はあなたを見てどのように言いますか?
- 6. How do you feel about your condition? / あなた自身はご自分の状態をどのように思いますか?
- 7. What makes you most anxious about your treatment? Please check up to 3 from following lists. /これから受ける、あるいは今うけている治療で、何がいちばん不安ですか。3つまで選んで○をつけてください
- 8. Do you have anxiety about your disease, treatment or others? Could you please give details? /病気や治療のこと、またはそれ以外のことでも何か気になることはありませんか?前問と重複してもかまいませんので、具体的にお書き下さい。
- 9. Do you want to continue the current treatment?/今の治療を続けたいと思いますか?
- 10. Are you engaged in the same work as pretreatment?/お仕事は治療前と同じですか?
- 11. Do you feel there has been change in the relationship between you and your colleague/family before and after the treatment?/ 治療の前後で、ご家族あるいは職場の同僚などとの人間関係に変化がありましたか?
- 12. Was there anything particularly harsh or worrying about your treatment?/治療でつらかったこと、恐かったことは何でしたか?
- 13. <u>Do you have any opinions, problems or requests regarding your primary doctor?</u> /上記以外でお困りのこと、ご意見、医師への希望などありましたらお書きください。
- 14. Lastly, how would you rate your current daily living? Please circle the number between 1 and 10 that best applies to you./最後に、現在の生活状態を10段階評価し、該当する数字を○で囲んでください。

#### Why did JCOG DC terminate QoL data management?

- JCOG Executive Committee in Nov 1997
- Dr.Fukuda presented the miserable situation regarding the QoL assessment
  - There were **no patient identifier** and **no study number** in most of the questionnaires kept at JCOG Data Center (JCOG DC).
  - Some of the questionnaires were filled with patient's complaints
    - "I was very uncomfortable answering those questions"
    - "I didn't understand how my answer would contribute to progress of the medical science"
    - "I had troubled answering a question about family because I was divorced"
  - Those complaints were not provided feedback to a primary doctor
    - No one including PI/SC acted upon these complaints
      - At that time, primary doctor received the questionnaire from patients
- More than 60% of the ongoing QoL assessments were terminated

# After the termination of most QoL assessment in JCOG

From 1998 to 2002

#### **Establishment of "JCOG QoL unit"**

- "JCOG QoL unit" in JCOG DC was established in Dec 1997
  - To establish feasible and valuable QoL assessment method in JCOG with limited budget and human resources
- Committee structure:
  - Chair: Dr.Naohito YAMAGUCHI (Director@JCOG DC)
  - Secretary: Dr. Haruhiko FUKUDA (Deputy director@JCOG DC)
  - Dr.Kenji EGUCHI (@Sikoku CC)
  - Dr.Kojiro SHIMOZUMA (@Kawasaki medical univ.)
  - Dr.Noriyuki KATSUMATA (@NCCH)
  - Ms. Miyuki NIIMI (DM@JCOG DC)
  - Dr. Kimio YOSHIMURA (@NCC)

#### Was QoL assessment feasible in JCOG study?

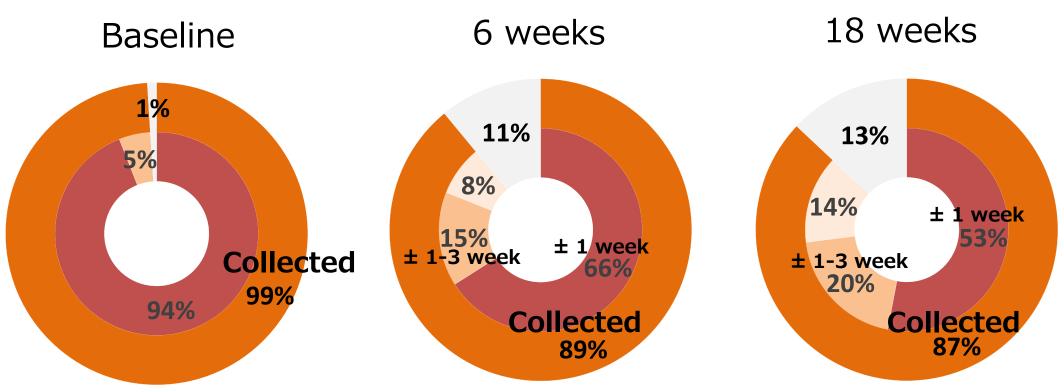
- A feasibility study (J9803) was carried out by JCOG QoL unit
  - Objectives:
    - To establish a method to manage QoL assessment including data management and reminders in JCOG QoL unit
    - To evaluate a feasibility of QoL assessment

#### Methods

- All patients enrolled in J9802 (rPIII) were consulted and registered to J9803
- Questionnaire: FACT-B\*1, FACT-Taxane\*2
- Assessment points: Baseline, 6 weeks, 18 weeks
  - Prespecified window was ± 1 week at 6 weeks and 18 weeks
- Data management and reminders was done by JCOG QoL unit
  - 2 persons (1 from JCOG DC and 1 from investigator) were in charge of practice
  - Baseline questionnaire was distributed prior to patients enrollment and others were distributed 2 weeks before the assessment points in each patient
  - Reminders was sent if JCOG QoL unit did not receive questionnaire after 2 weeks of the planned assessment points

#### Result of J9803

A total of 150 patients were enrolled in this study



- Collection rate was judged as sufficient if the window of 3 weeks was accepted
- Practical burden at JCOG QoL unit was more difficult than expected

# Having said that JCOG DC cannot support QoL data management…

- After most of the ongoing trials including QoL assessment were terminated in Nov 1997, some trials included QoL assessment
  - Lung medical: J9702, J0104, J0207
  - Colorectal: J0212 (rectal cancer)
  - Urology: J0209 (bladder cancer), J0401 (prostate cancer)
- There was an urgent need to establish a JCOG policy regarding the QoL assessment
  - Investigators might start QoL assessment independently without knowledge regarding appropriate QoL assessment

#### Establishment of "JCOG QoL ad hoc committee"

- "JCOG QoL ad hoc committee" was established in Sep 2003
  - To establish a policy of QoL assessment in JCOG including required resources
- Committee structure :
  - Chair: Dr.Kunitoh (@NCCH)
  - Vice chair: Dr.Fukuda (@JCOG DC)
  - Secretary general: Dr.Sato (@JCOG OPS)
  - Secretary: Ms.Kaba, Dr.Yoshimura (@JCOD DC), Ms.Suzuki (@JCOG OPS)
  - Member (recommended by group chair)
    - Dr.Ando (from Lung medical), Dr Watanabe(from Lung Sx), Dr.Yamada (from GI),
       Dr. Nashimoto, Dr. Tsujinaka (from Gastric Sx), Dr.Igaki (from Esophageal),
       Dr.Osumi(from breast), Dr.Wasada(from Lymphoma), Dr.Kasamatsu(from Gyne),
       Dr.Fujita(from colorectal), Dr.Kakei, Dr. Hinotsu(from urology), Dr.Chuuman(from Bone & STS),
       Dr.Ito (from radiation), Dr.Sonoda(from brain)

Advisor: Dr.Katsumata, Ms.Niimi

# What was discussed at the committee? (1/3)

#### 1. What kind of questionnaire should be used?

- It must have been validated
- Use a questionnaire with a patient self-reporting format
  - Questionnaires must be returned directly to the QOL Study Coordinator without the questionnaires being seen by the primary physicians.
- Consideration should be made in a study-by-study basis on whether to use a generic scale or a disease-specific scale (or both).

#### 2. In which trials should QoL be assessed?

- A QOL assessment is conducted <u>only in phase-III trials</u>.
  - Interpretation is quite difficult if there is no control arm
  - If the objective is to determine the feasibility of QOL assessment in clinical trials, it may be implemented in a single arm study

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# What was discussed at the committee? (2/3)

#### 3. What is required resources to perform QoL assessment?

- The sending and collection of QOL questionnaires should be arranged by the study group by appointing a QOL Study Coordinator.
  - From the experience of J9803 feasibility study and J9702, QoL study coordinator should be a dedicated position to the task
    - Dr.Kunitoh presented his experience of QoL Study Coordinator in J9702
      - » He struggled with the QoL data management
  - At the time, JCOG DC could not afford to allocate a person who was responsible for the QoL data management
- It is desirable to assign one QOL Study Coordinator for each group
  - Considering accumulation of know-how, communication with the JCOG DC etc.
    - A different QoL study coordinator had been assigned in each study except for Lung medical group

# What was discussed at the committee?(3/3)

#### 4. What is a recommended analysis method?

- Binary data analysis is recommended as the primary analysis method to compare the proportion of improvement exceeding a certain pre-specified threshold.
  - Missing data are counted as negative values
- The primary analysis method should be determined at the planning stage of the trial and described in the protocol

## Why wasn't it reach a consensus?

- Whether QoL assessment should be included in all randomized phase III
  - For : QoL is considered **as one of the main pillars** for endpoints
    - Japan (JCOG) lagged behind the rest of the world regarding QoL assessment
    - It is capable of introducing patients perspective into clinical research
  - Against: Whether "QoL is important" and whether "QoL is measurable" should be separate discussion
    - QoL assessment was not a priority compared with survival and toxicity
    - It should be discussed whether QoL assessment is worth the time and effort.
    - It is unclear how to use QoL data for **decision-making process** to conclude a standard treatment

#### Japan Clinical Oncology Group

Policy No. 30
Title: QOL Assessment
Scope of Coverage:
Study group, QOL study coordinator, Protocol Review Committee (PRC) and Data Center

#### **QOL Assessment**

#### 1. Current Situation and History

#### 1.1. Current Situation in QOL Assessment

As stated in the large monograph recently published by NCI (Cancer Outcomes Research: The Arenas of Application, J Natl Cancer Inst Monogr. 2004,(33)), the significance of outcome evaluation from the patient's point of view is widely recognized and various instruments exist in assessing Health-related Quality of Life (HRQOL). However, since HRQOL is inadequately measured, the results of the analysis have limited impact. On the other hand, the collection rate of QOL questionnaire in recent clinical trials in Japan is >90% and the differences in QOL between treatment arms have become to be detected.

#### 1.2. QOL Ad hoc Committee and Policy Development

In the QOL assessments conducted at JCOG in the past, despite significant burden to the researchers and the Data Center, there were almost no useful assessments in terms of the collection rate, reliability, usefulness of the data and methodology. Given this fact, implementation of full-scale QOL assessment study (JCOG9803) was planned and conducted, but a decision was made that QOL assessment was not feasible under the system at that time, when almost half of the planned accrual was done. However, there was increasing demand from researchers in various specialties to use QOL as a secondary endpoint in JCOG studies. Therefore, a QOL Ad hoc Committee, which included the investigators of each organ group at JCOG, was established to determine future directions for QOL assessment at JCOG. The QOL Ad hoc Committee held three meetings to discuss the definition of QOL assessments in JCOG and requirements for conducting QOL assessments.

#### 2. Objectives

The objectives of this policy are to define QOL assessment in JCOG and establish guidelines for implementation of QOL assessments.

#### 3. Definition of a QOL Assessment

In JCOG, a QOL assessment is defined as follows: If any of the followings are not applicable, the QOL assessment is outside of the scope of this policy.

#### 3.1. The Questionnaire to be used

Use a questionnaire with a patient self-reporting format. Whenever possible, use a questionnaire that has been validated. (An assessment where a primary physician/CRC interviews patients and completes the form is not designated as a QOL assessment.)

- Consensus through discussion in the committee are included
- QoL assessment in JCOG should be followed in the policy
  - Validated questionnaire
  - A patient self-reporting format
  - QOL Study Coordinator
  - Binary data analysis with missing data as negative value
- This policy was designed to be revised every 5 years
  - It has never been revised

# After the establishment of JCOG QoL policy

From 2005 to 2017

#### JCOG trials between 2005-2017

Group			Random	ize phase	III (62)			Non r	andomized	d and/or p	hase I, I	I (43)
Lung medical (9)	J0509	J0605	J0803	J1201	J1210	J1404	J1701	J0901	J1011		<u> </u>	
Lung Sx (8)	J0707	J0802	J1206	J1413	J1508	J1708		J0804	J1211			
Gastric (15)	J0501	J0705	J0912	J1001	J1013	J1104	J1108	J0703	J1002	J1301C	J1401	J1704
	J1507	J1509	J1711									
Esophageal (8)	J0502	J1109	J1314	J1409	J1510			J0604	J0807	J0909		
Colorectal (11)	J0603	J0910	J1006	J1007	J1018	J1107	J1310	J0903	J1609INT			
	J1502C	J1503C										
HBP (8)	J1113	J1202	J1213	J1611				J0506	J0805	J1106	J1407	
GI endoscopy (7)	J1207	J1217						J0508	J0607	J1009	J1604	J1612
Breast (4)	J1017	J1204	J1607					J1505				
Lymphoma (8)	J0601	J1111C	J1411					J0904	J0907	J0908	J1105	J1305
Gynecology (6)	J0602	J1311	J1412					J0503	J1101	J1203		
Urology (2)	J1019	J1403										
Bone & STS (3)	J0905	J1306	J1610									
Radiation (8)	J0701	J1408						J0702	J0906	J1015	J1208	J1315
								J1402				
Brain (7)	J0504	J1016	J1114C	J1303	J1308C	J1703		J0911				
H & N (4)	J1008	J1601						J0706	J1212			
Skin (3)	J1309							J1602	J1605			

#### JCOG trials between 2005-2017

**42%** → **13%** 

**7**% → **2**%

Group			Randomiz	e phase 1	III ( <b>8</b> /62)			Non rar	ndomized	and/or p	hase I, I	I ( <b>1</b> /43)
Lung medical (4/9)	J0509	J0605	J0803	J1201	J1210	J1404	J1701	J0901	J1011			
Lung Sx ( <b>0</b> /8)	J0707	J0802	J1206	J1413	J1508	J1708		J0804	J1211			
Gastric ( <b>2</b> /15)	J0501	J0705	J0912	J1001	J1013	J1104	J1108	J0703	J1002	J1301C	J1401	J1704
	J1507	J1509	J1711									
Esophageal (1/8)	J0502	J1109	J1314	J1409	J1510			J0604	J0807	J0909		
Colorectal (1/11)	J0603	J0910	J1006	J1007	J1018	J1107	J1310	J0903	J1609INT			
	J1502C	J1503C										
HBP ( <b>0</b> /8)	J1113	J1202	J1213	J1611				J0506	J0805	J1106	J1407	
GI endoscopy ( <b>0</b> /7)	J1207	J1217						J0508	J0607	J1009	J1604	J1612
Breast ( <b>0</b> /4)	J1017	J1204	J1607					J1505				
Lymphoma ( <b>0</b> /8)	J0601	J1111C	J1411					J0904	J0907	J0908	J1105	J1305
Gynecology (0/6)	J0602	J1311	J1412					J0503	J1101	J1203		
Urology ( <b>0</b> /2)	J1019	J1403										
Bone & STS ( <b>0</b> /3)	J0905	J1306	J1610									
Radiation (1/8)	J0701	J1408						J0702	J0906	J1015	J1208	J1315
								J1402				
Brain ( <b>0</b> /7)	J0504	J1016	J1114C	J1303	J1308C	J1703		J0911				
H & N ( <b>0</b> /4)	J1008	J1601						J0706	J1212			
Skin ( <b>0</b> /3)	J1309							J1602	J1605			
	1 1 2 2 2											75

# QoL assessment in lung medical group

Study ID Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment outcome
J0509 Metastatic	2007-2010	284	Сх	rIII	Kurihara's QoL questionaire (QOL-ACD)*1	Exclusive coordinator (Dr. Ando)	Completed
J0803 Metastatic	2008-2010	276	Cx	rIII	FACT-L	Exclusive coordinator (Dr. Ando)	Completed
J1201 Metastatic	2013-	370	Cx	rIII	FACT-L	Exclusive coordinator (Dr. Ando)	
J1210 Metastatic	2013-2017	430	Сх	rIII	FACT-L	Exclusive coordinator (Dr. Ando)	Completed

- QoL assessment was completed in all trials and performed according to JCOG QoL policy (by exclusive QoL coordinator, Dr. Ando)
- The results of QoL analyses were included in primary article (J0509, J0803)

<sup>\*1</sup> Kurihara M et al., Development of Quality of Life Questionnaire in Japan: quality of life assessment of cancer patients receiving chemotherapy. Psycho-Oncology. 1999;8(4):355-63. 営利目的での使用はご遠慮ください

#### **QoL** assessment in GI cancer

Study Disease status	Accrual period	N	Tx	Phase	Questionnaire	QoL data management	QoL assessment outcome
J0912 Gastric Curative	2010-2013	921	Sx	rIII	EORTC QLQ-C30, EORTC QLQ-STO22	Exclusive coordinator (Dr. Ando)	Completed
J1018 Colorectal Metastatic	2012-	250	Cx	rIII	EQ-5D PRO-CTCAE	Exclusive coordinator (Dr. Ando)	PRO-CTCAE was terminated
J1108 Gastric Metastatic	2013-2017	101	Cx	rIII	EQ-5D	Exclusive coordinator (Dr. Ando)	Completed
J1315 Liver Curative	2017-	290	Rx/ Sx	nrIII	EQ-5D	Exclusive coordinator (Dr. Ando)	
J1409 Esophageal Curative	2015-	300	Sx	rIII	EORTC QLQ-C30	Exclusive coordinator (Dr. Ando)	

 QoL assessment was performed according to JCOG QoL policy (by exclusive QoL coordinator, Dr. Ando)

# Are we ready to perform QoL assessment in all randomized phase III trials?

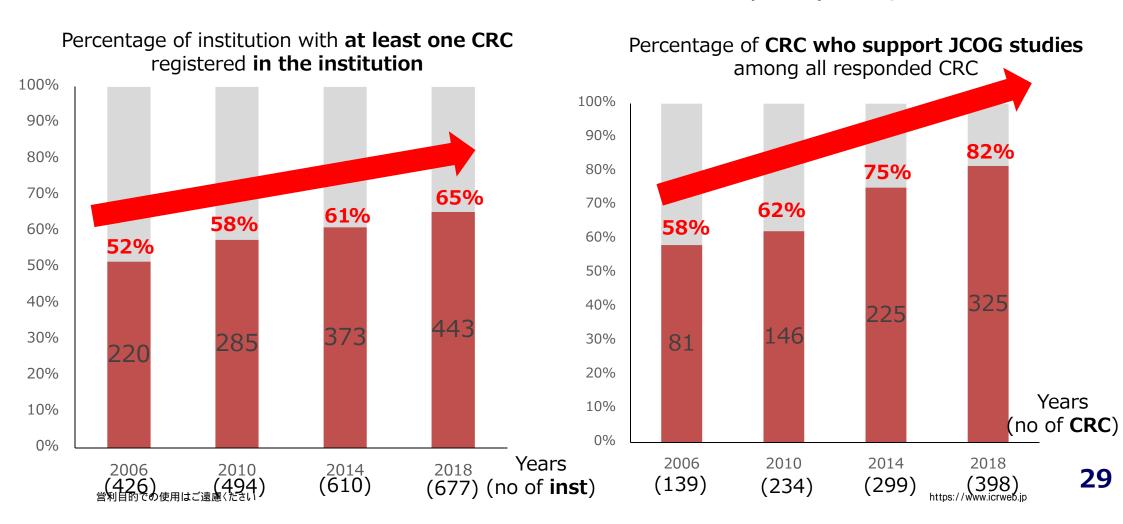
- It seems that JCOG is not fully ready to perform QoL
- Central (JCOG Data Center) issues
  - JCOG DC can afford to accept QoL data management compared to 10 years ago
    - Reminders can be easy to set up using current electronic system
    - Costs for data entry clerk is needed (may not be so expensive)
  - EDC system and introducing platform with Apps (ePRO) or
     Interactive Voice Response system may help collection of QoL data
    - Rental fee for tablet or system is needed (would be so expensive)
- Central issues may not be a barrier for QoL assessment as far as:
  - Investigators can get funds for QoL data management
  - We can receive support from Dr.Ando as a QoL Study Coordinator

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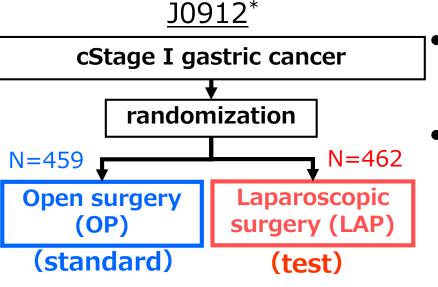
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# Are we ready to perform QoL assessment in all randomized phase III trials?

- Local issues
  - Support from CRC has been improved but insufficient
  - Reminders cannot be omitted to maintain the quality of QoL data



#### **Case studies: J0912 & J1018**



- Questionnaires: EORTC QLQ-C30, -STO22
  - Baseline, 30 days, 90 days, 1 year, 3 years
- Number of participating institutions = 33
  - QoL assessment was planned in 4 institutions considering feasibility
- Questionnaires: EQ-5D, PRO-CTCAE
  - PRO-CTCAE: Baseline, each courses within 6m
- PRO-CTCAE was terminated
  - PRO-CTCAE was considered as a heavy burden for investigators due to strict recall period of 7 days
  - The burden was considered as one of the reasons for poor accrual

J1018

cStage IV colorectal cancer

# Future vision of QoL research in JCOG (my personal impression)

- It may be about time to revise QoL policy
  - DC seems to be ready to support QoL data management if valuable
    - The demand of QoL assessment has been increasing in clinical research
    - Results of JCOG trials should be supported by multiple parties
- Requirements (both JCOG DC/OPS and investigators)
  - Become familiar with QoL/PRO
    - Some investigators cannot answer a concreate questionnaire when we ask
       "What kind of questionnaires do you want to use?"
  - Secure sufficient funds
    - Required additional costs to coordinate QoL data management
  - Consider not only investigators burden but patient burden
    - EORTC "Item Library\*" would be an option

## **Summary & Conclusion**

 In 1990's, JCOG committed to QoL research but the majority of JCOG trials failed to complete QoL assessment

 While most of QoL assessment was completed thanks to Dr.Ando, the number of QoL research plummeted after the establishment of JCOG QoL assessment policy

 Both central and local systems should be improved to expand our commitment to QoL assessment in JCOG studies

# Thank you for your kind attention