

The Second Quarter of the Year Ending March 2010

## Financial Results



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November 25, 2009

TRANS GENIC INC.

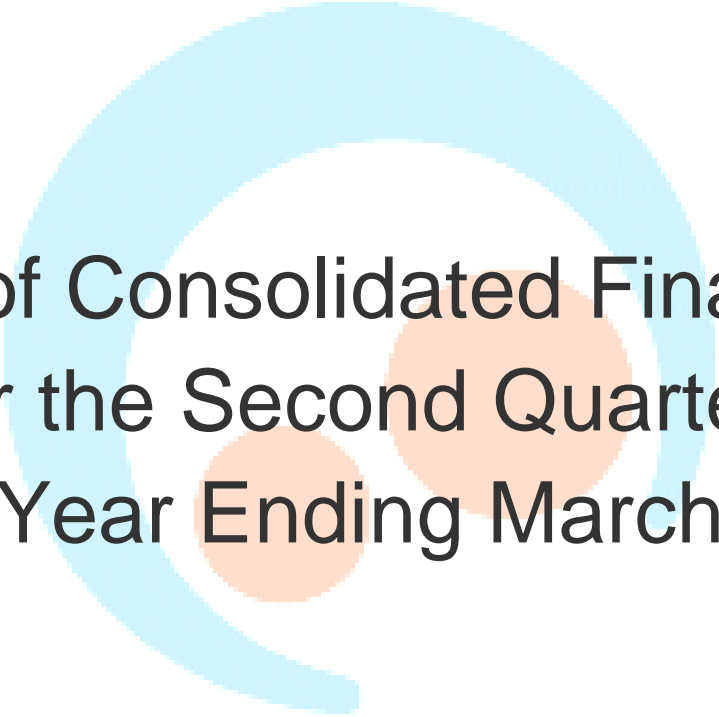
Note: These materials are based on economic and social conditions as of the time this presentation was prepared and on reasonable management plans by the company. Revisions may be made without prior notice due to changes in the operating environment.

These materials incorporate forward-looking statements. Various factors including market trends, development of new technologies and competitors' moves could cause actual operating and financial results to differ from the stated in these materials.

# Table of Contents



- . **Overview of Consolidated Financial Results for the Second Quarter of the Year Ending March, 2010**
  1. Second Quarter Highlights
  2. Sales Breakdown by Segment
- . **Consolidated Business Forecast for the Year Ending March 2010**
- . **Current Status of Research and Development**
  1. Research and Development Strategies
  2. Development Pipelines
  3. Development Pipeline – Pancreatic Cancer Markers
- . **Research Topics**
  1. Example : New Recombination System



. Overview of Consolidated Financial Results  
for the Second Quarter  
of the Year Ending March, 2010

# Key Points and Analysis by Segments

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## 1 . Mouse Related Business

- ( 1 ) Basic policy: Important business based on the world-class technology.
- ( 2 ) Universities and research institutions have tightened budget.
- ( 3 ) Pharmaceutical companies have narrowed down R&D themes.
- ( 4 ) Price competition: Humanizing animal technology has not been effectively used yet.

## 2 . Antibody Related Business

- ( 1 ) Development process “Reagents    Diagnostic reagents    Therapeutic antibodies” is promising
- ( 2 ) Difficult to announce successful models of GANP® mice in custom production service, for confidentiality reasons.
- ( 3 ) Limited number of custom production service causes low profitability.

## 3 . Reagent Agency Business

- ( 1 ) Need more time to sell research reagents directly online, because of conventional trade practices in the biotech industry.
- ( 2 ) Cytokine enjoys brisk sales.

## 4 . Other Business

- ( 1 ) Synergy has been seen in drug discovery research support service with Mouse Related Business.



## 1. Revision of Existing Business - Strategies by Segments

### ( 1 ) Mouse Related Business

Custom production service

Order backlog : 121,833 thousand yen. Steady sales.

Aim for further **cost-cutting**.

### ( 2 ) Antibody Related Business

Product Sales

Stop custom production service and focus on **product development**.

Produce approx. **100 antibody products p.a.** in addition to **160 products** currently available.

Seek for competitiveness in developing antibody products.

a. GANP® mice, b. Assessment of GPCR antibodies, c. Tie-up with National Cancer Center

### ( 3 ) Reagent Agency Business

Bio-products (**Cytokine business**)

Cancer immunotherapy field: Enhance sales activities.

Launch new products : Intend to make more sales than in past years.

Lab-products (“direct delivery service of reagents”): Discontinued

### ( 4 ) Other Business

Others

Drug discovery research support service: Tie-up with overseas venture companies (Deltagen Inc., TriStar Technologies LLC., JSW-Research Ltd.)

**Integrated into Mouse Related Business.**

Reproductive treatment field : Downsized, but there is **social demand**.

Healthcare business : Discontinued



## 2. Company-Wide Cost-Cutting

### (1) TRANS GENIC (parent company) / Primmune (subsidiary)

Cost-cutting: Target 200 million yen

Reduce SG&A expenses

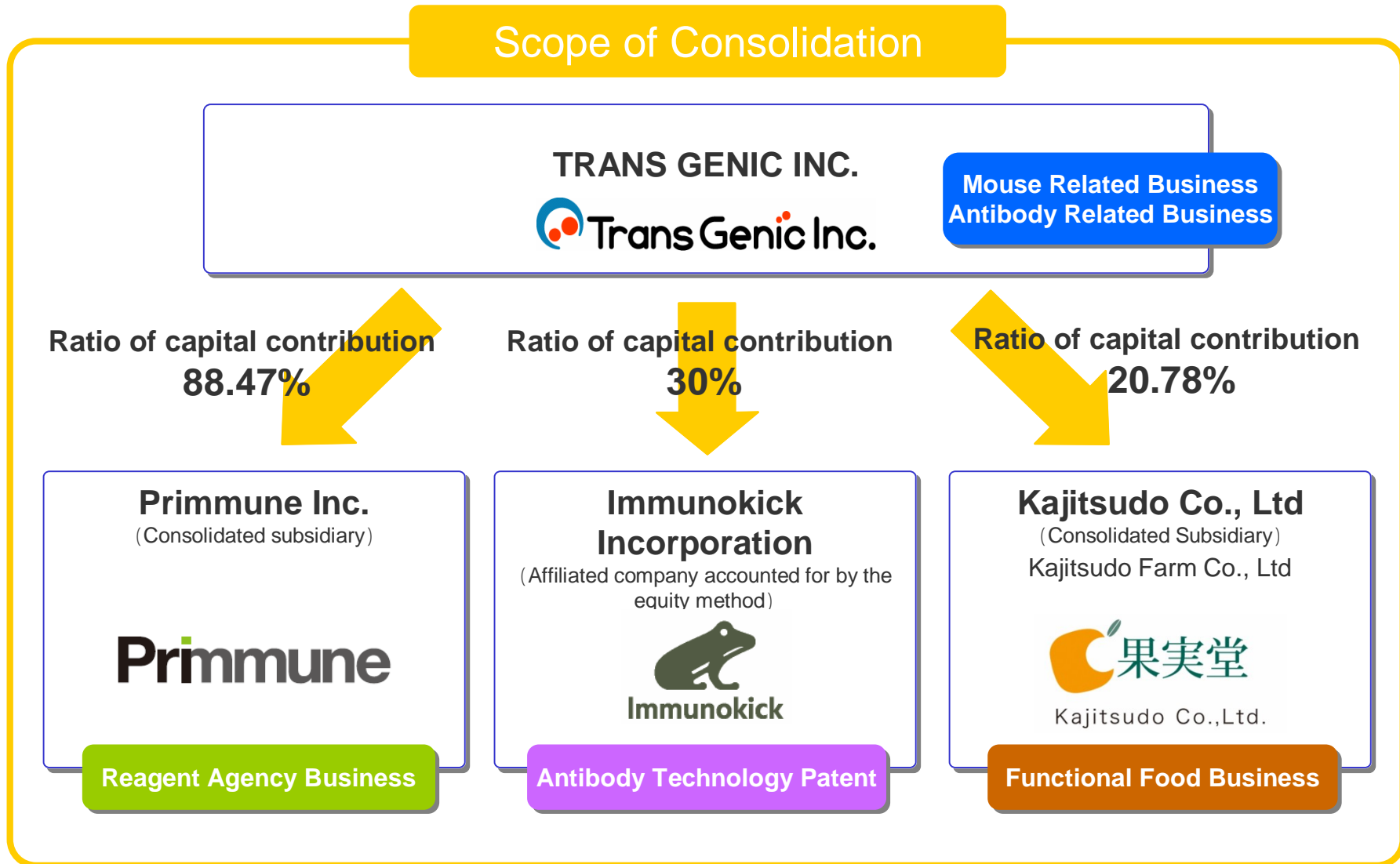
Reduce personnel expense, close Fukuoka Branch etc.

## 3. New Business Development

### (1) Capital Contribution to Kajitsudo

Find out business where synergy can be expected between TRANS GENIC and Kajitsudo

# Second Quarter : Scope of Consolidation



# Second Quarter Highlights

Unit: thousand yen	For the six months ended September 30, 2008	For the six months ended September 30, 2009	Change	Rate of Change
Net Sales	134,542	243,550	109,008	81.0%
Mouse Related Business	55,648	86,806	31,158	56.0%
Antibody Related Business	42,590	25,363	17,227	40.4%
Reagent Agency Business	27,626	47,034	19,408	70.3%
Functional Food Business*	-	61,123	61,123	-
Other Business	8,677	23,221	14,544	167.6%
Cost of sales	76,749	139,330	62,581	81.5%
Gross profit	57,792	104,219	46,427	80.3%
SG & A expenses	370,668	319,401	51,267	13.8%
R&D expense	91,278	84,807	6,471	7.1%
Operating income (loss)	312,875	215,182	97,693	-
Ordinary income (loss)	307,207	223,954	83,253	-
Net income (loss)	313,795	189,845	123,950	-

\* Functional Food Business : A new segment included in the scope of consolidation at the end of the first quarter.  
The figure covers only a three-month period (July 1- September 30, 2009).



# Sales Breakdown by Segment

## – Mouse Related Business

Unit: thousand yen	For the six months ended September 30, 2008	For the six months ended September 30, 2009	Change	Rate of Change
Sales of gene information	3,563	14,775	11,212	314.6%
Sales of custom production service	52,085	72,031	19,946	38.3%
Mouse production	32,977	62,591	29,614	89.8%
Phenotype analysis	14,132	6,860	7,272	51.5%
Others	4,976	2,580	2,396	48.2%
<b>Total sales of Mouse Related Business</b>	<b>55,648</b>	<b>86,806</b>	<b>31,158</b>	<b>56.0%</b>

### ◆ Sales of Gene Information

Sales increased due to big sales contracts in TG Resource Bank® and increasing number of contracts with university research institutes.

### ◆ Sales of Custom Production Service

Sales of mouse production increased significantly, thanks to active sales promotion.

# Sales Breakdown by Segment

## – Antibody Related Business

Unit: thousand yen	For the six months ended September 30, 2008	For the six months ended September 30, 2009	Change	Rate of Change
Sales of antibody products	22,825	21,163	1,662	7.2%
Sales of custom production service	19,765	4,200	15,565	78.8%
GANP®	11,010	-	11,010	-
Others	8,755	4,200	4,555	52.0%
<b>Total sales of Antibody Related Business</b>	<b>42,590</b>	<b>25,363</b>	<b>17,227</b>	<b>40.4%</b>

### ◆ Sales of Antibody Products

Sales remained at the same level year on year.

It is expected that self-developed technologies and products will have positive impact on increasing sales in the future.

### ◆ Sales of Custom Production Service

Sales decreased due to refraining from receiving orders of custom production service.

# Sales Breakdown by Segment

## – Reagent Agency Business

Unit: thousand yen	For the six months ended September 30, 2008	For the six months ended September 30, 2009	Change	Rate of CChange
Cytokine related sales	25,331	29,637	4,306	17.0%
Sales of PTG products	2,294	17,396	15,102	658.3%
Total sales of Reagent Agency Business	27,626	47,034	19,408	70.3%

### ◆ Cytokine Related Sales

Cytokine enjoyed brisk sales.

### ◆ Sales of PTG Products

Thanks to the marketing agreement with ProteinTech Group, Inc. (U.S.A) concluded in May 2008, our product lineup of research reagents have been expanded, boosting sales. Currently we deal with approx. 25,000 items.

# Sales Breakdown by Segment

## – Functional Food Business

Unit: thousand yen	For the six months ended September 30, 2008	For the six months ended September 30, 2009	Change	Rate of Change
Sales of “baby leaf (mesclun)”	-	51,409	51,409	-
Sales of dressing	-	4,710	4,710	-
Sales of vegetable	-	3,134	3,134	-
Others	-	1,868	1,868	-
Total sales of Functional Food Business	-	61,123	61,123	-

\* Functional Food Business : A new segment included in the scope of consolidation at the end of the first quarter.

◆ **Functional Food Business has been included in the scope of consolidation from July 1, 2009 (July 1 – September 30, 2009)**

◆ **Sales of “Baby Leaf (Mesclun)”**

Production of “baby leaf (mesclun)”, the main product of this business, reduced by flood damage and lack of sunlight, resulting in sluggish sales.

# Sales Breakdown by Segment

## – Other Business

Unit: thousand yen	For the six months ended September 30, 2008	For the six months ended September 30, 2009	Change	Rate of Change
Sales of drug discovery research support service	2,330	15,950	13,620	584.5%
Sales of healthcare products	2,724	-	2,724	-
Sales of reproductive technology training business	1,300	350	950	73.1%
Others	2,323	6,921	4,598	197.9%
<b>Total sales of Other Business</b>	<b>8,677</b>	<b>23,221</b>	<b>14,544</b>	<b>167.6%</b>

### ◆ Sales of Drug Discovery Research Support Service

Sales increased by 584.5 % year on year due to large orders for drug assessment with Alzheimer model mice of JSW-Research Ltd.

### ◆ Healthcare Products: Discontinued

# Summary for the Second Quarter



Sales increased and losses decreased due to **business plans changed** to strengthen revenue base.

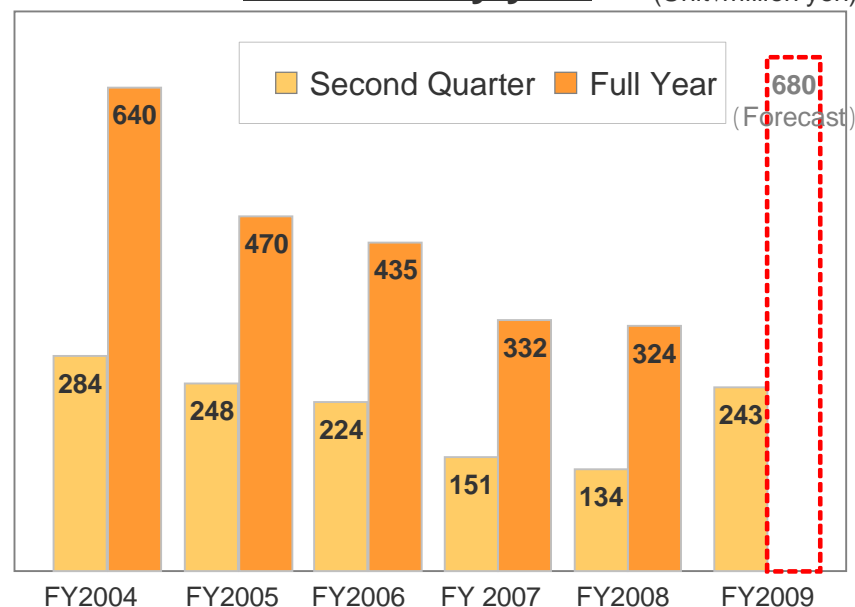
## ◆ Net Sales

Net sales increased by 81.0 % year on year to 243 million yen because of booming Mouse Related Business, Reagent Agency Business and Other Business in addition to newly consolidated Functional Food Business, despite fall in sales of Antibody Related Business by refraining from receiving orders of custom production service.

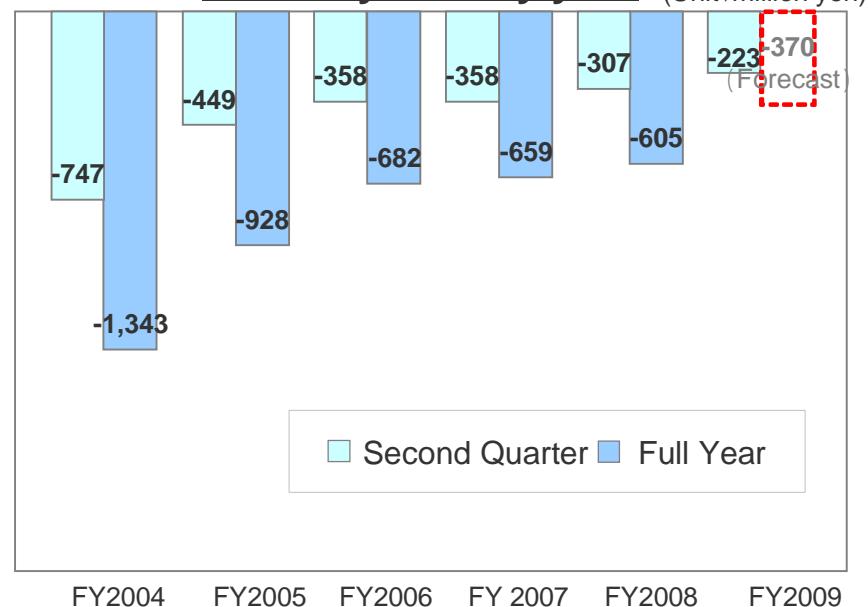
## ◆ Income(Loss)

Operating loss, ordinary loss and current net loss declined due to narrowing down R&D themes and cutback in SG&A expenses.

**Net sales by year** (Unit: million yen)



**Ordinary loss by year** (Unit: million yen)





# . Consolidated Business Forecast for the Year Ending March 2010

# Consolidated Business Forecast for the Year Ending March 2010

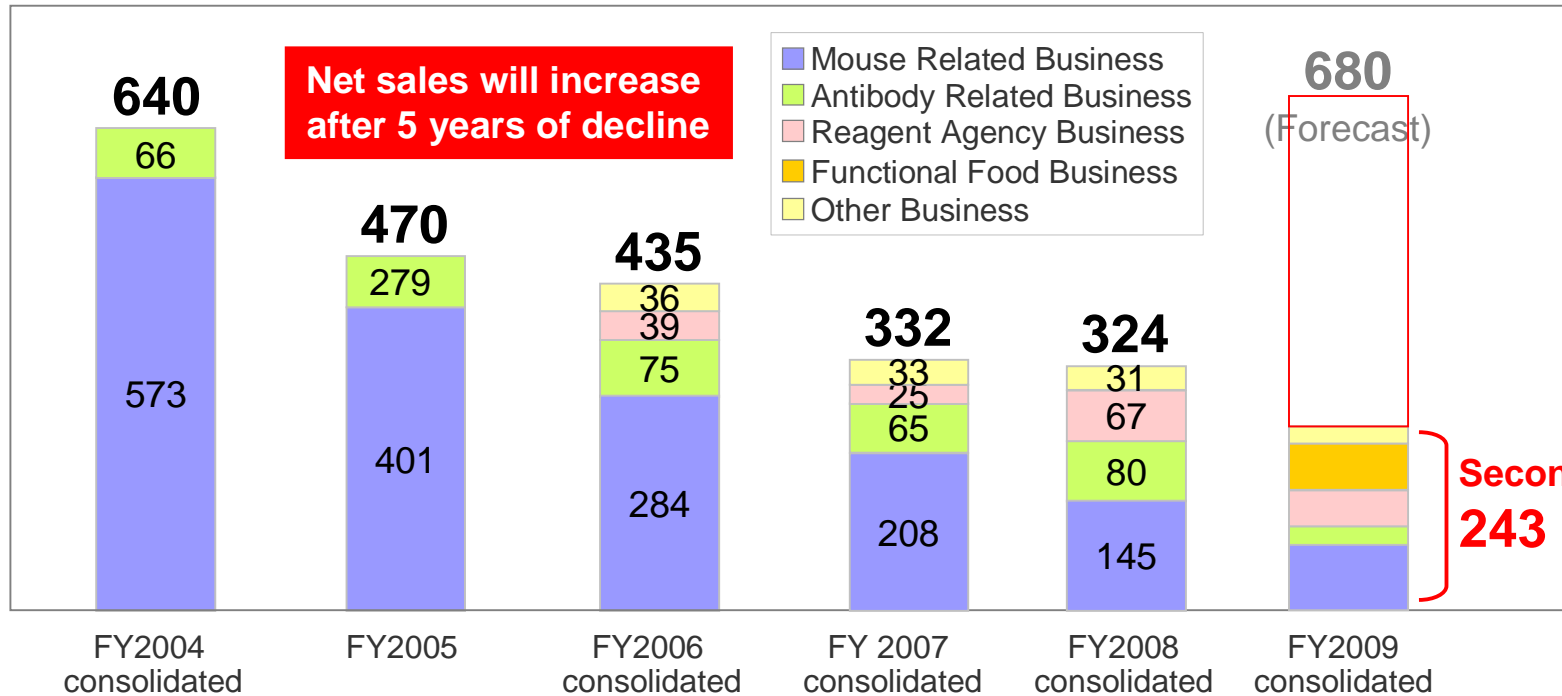
Unit: thousand yen	For the six months ended September 30, 2009 (Forecast*)	For the six months ended September 30, 2009 (Result)	For the whole year ending March 2010 (Forecast*)
Net Sales	234,000	243,550	680,000
Mouse Related Business	83,500	86,806	169,200
Antibody Related Business	22,200	25,363	59,100
Reagent Agency Business	47,500	47,034	93,000
Functional Food Business	60,100	61,123	324,100
Other Business	20,700	23,221	34,600
Cost of sales	135,000	139,330	428,000
Gross profit	99,000	104,219	252,000
SG &A expenses	304,000	319,401	625,000
R&D expense	76,500	84,807	145,100
Operating income	205,000	215,182	373,000
Ordinary income	204,000	223,954	370,000
Net income	206,000	189,845	375,000



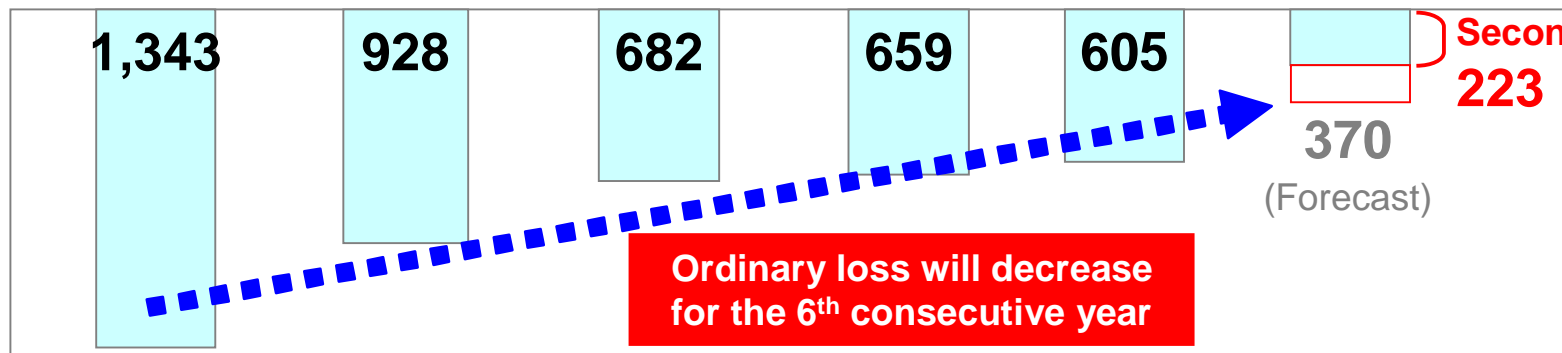
# Consolidated Business Forecast for the Year Ending March 2010

Unit: million yen

Net Sales



Ordinary loss



# Short Term Plans



<b>Company-Wide Cost-Cutting</b>	✓ Streamlining of administration
<b>Sales Increase</b>	✓ Custom production service of knockout mouse ✓ Sales of self-developed antibody products ✓ Cytokine ✓ Business where synergy can be expected between TRANS GENIC and Kajitudo ✓ Synergy between DNA/gene sequencing technologies and functional analysis technologies

# From Now to the Future



Med- and Long-Term: Licensing Revenues from **Pharmaceuticals**



Med Term: Licensing Revenues from **Diagnostic Reagents**



Short Term: Licensing Revenues from **Technologies**



**New Business Development**



**Reviewing Existing Business**



**Company-Wide Cost-Cutting**





# . Current Status of Research and Development

# Research and Development Strategies



## Short Term

Development of New Technology

- Expand product lineup of **self-developed antibodies** to raise profitability and make better use of GANP® mouse technology.
- Use screening system developed by National Cancer Center for assessment of antibodies in order to **add more values** to them.

## Mid Term

Discovery of New Biomarkers

- Produce antibodies by GANP® mouse technology, against **new biomarkers** identified by universities and research institutions and then verify their usefulness.
- Develop biomarkers into **diagnostic reagents** to earn licensing fees and milestone fees.

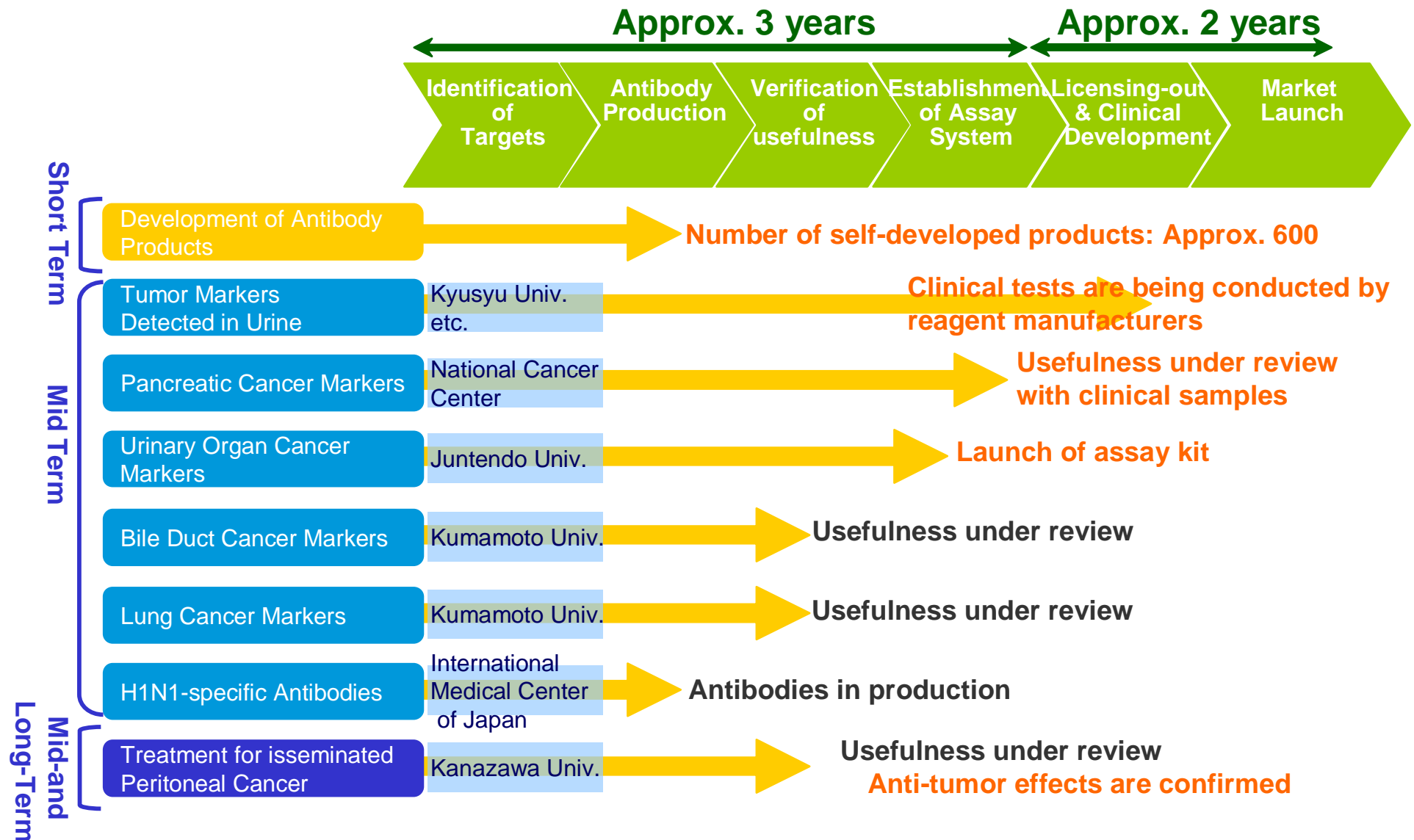
## Mid-and Long-Term

Identification of Innovative Druggable Targets

- Develop **therapeutic antibodies**, including those to treat disseminated peritoneal cancer.
- Earn licensing revenues from pharmaceuticals

Number of death from disseminated peritoneal cancer (gastric and pancreatic origin) : **Approx. 25,000 p.a.**

# Development Pipelines

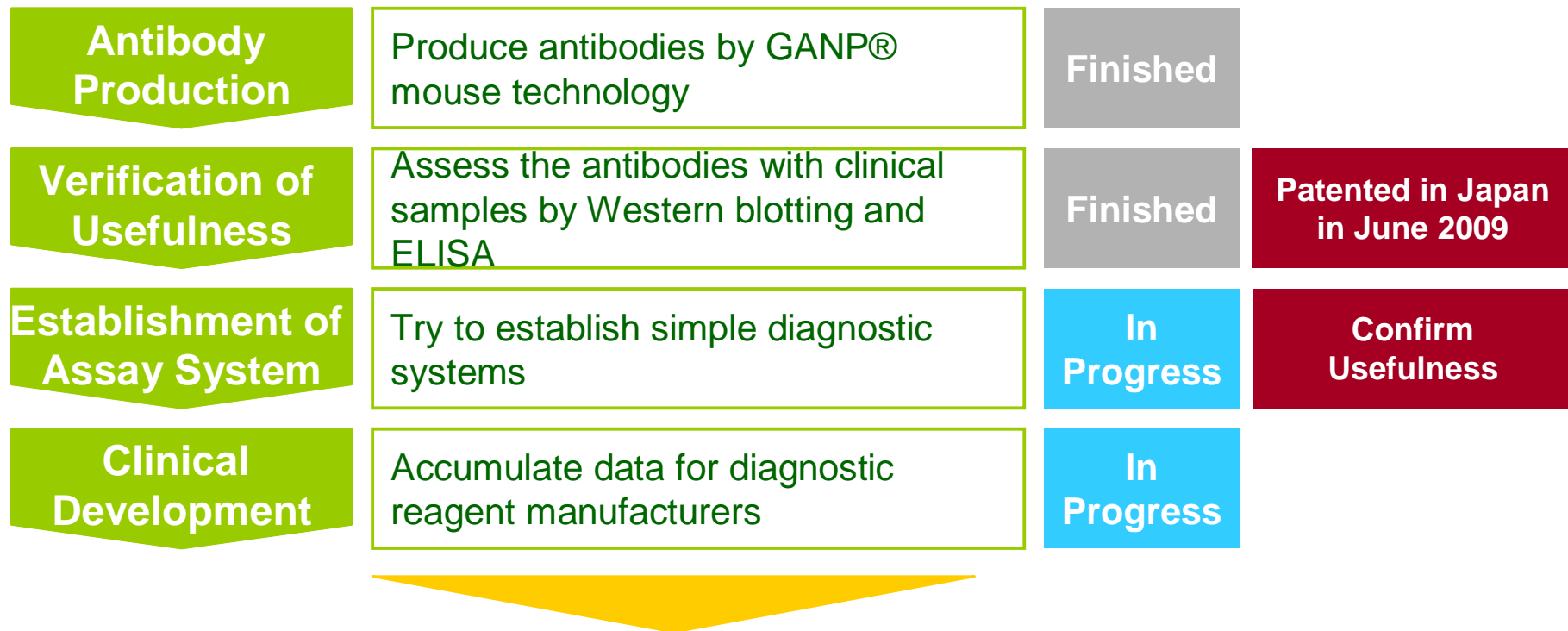


# Development Pipeline

## – Pancreatic Cancer Markers

### Outline and Progress of the Research

Producing antibodies by GANP® mouse technology, against new pancreatic cancer markers identified by National Cancer Center and establishing new diagnostic methods.



<b>Future Plan</b>	<ul style="list-style-type: none"> <li>✓ Intend to differentiate the antibodies from conventional pancreatic cancer marker (CA19-9).</li> <li>✓ Accumulate data for and license out to diagnostic reagent manufacturers.</li> </ul>
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# Development Pipeline

## – Verification of **Usefulness** : Pancreatic Cancer Markers

### Production and Specificity Assessment of **Anti HP-FGA** **Antibody**

- ✓ Succeeded in producing specific recognition monoclonal antibodies by GANP® technology against one of the two antigenic sites.
- ✓ Confirmed high expression of HP-FGA protein in plasma of pancreatic cancer patients, as a result of analysis of anti HP-FGA antibodies by Western blotting.

**Pancreatic cancer patients (12cases)    Healthy controls (12cases)**

HP-FGA



Source: J Biol Chem. 2009 Aug 20. Masaya Ono, *et al.*

HP-FGA : Prolyl 4-Hydroxylation of  $\alpha$ -Fibrinogen



# Research and Development Topics 2009



<b>Jan.</b>	Conclude Joint Research Agreement with National Cancer Center (to identify biomarkers)
	Our Subject was Selected for “Science and Technology Incubation Program in Advanced Regions” by Japan Science and Technology Agency
<b>Feb.</b>	Apply for a patent on “Antibody against Bile Duct Cancer Marker and its Diagnostic Application”
	“GANP® Mouse Technology” has been Patented by Australian Patent Office
<b>Apr.</b>	“GANP® Mouse Technology” has been Patented by European Patent Office
<b>May</b>	Hold Luncheon Seminar at the 6th GPCR meeting
	Report Results of our Research at the 56th Annual Meeting of the Japanese Association for Laboratory Animal Science
<b>Jun.</b>	“Antibody against Pancreatic Cancer Marker and its Diagnostic Application” has been Patented by Japanese Patent Office
	Launch Self-developed Anti GPCR Monoclonal Antibodies
<b>Jul.</b>	Conclude Joint Research and Development Agreement with International Medical Center of Japan (Antibodies against H1N1flu)
	Report Results of our Research at 7 <sup>th</sup> JHUPO Conference 2009
<b>Sep.</b>	Launch Self-developed AGEs Assay Kit
<b>Oct.</b>	Conclude Licensing Agreement with Japan Human Sciences Foundation (Related to Pancreatic Cancer Marker)
	Report Results of our Research at the 68th Annual Meeting of the Japanese Cancer Association
	Report Results of our Research at the 82nd Annual Meeting of the Japanese Biochemical Society
<b>Nov.</b>	Launch Self-developed Soluble CD147 (EMMPRIN) ELISA Kit

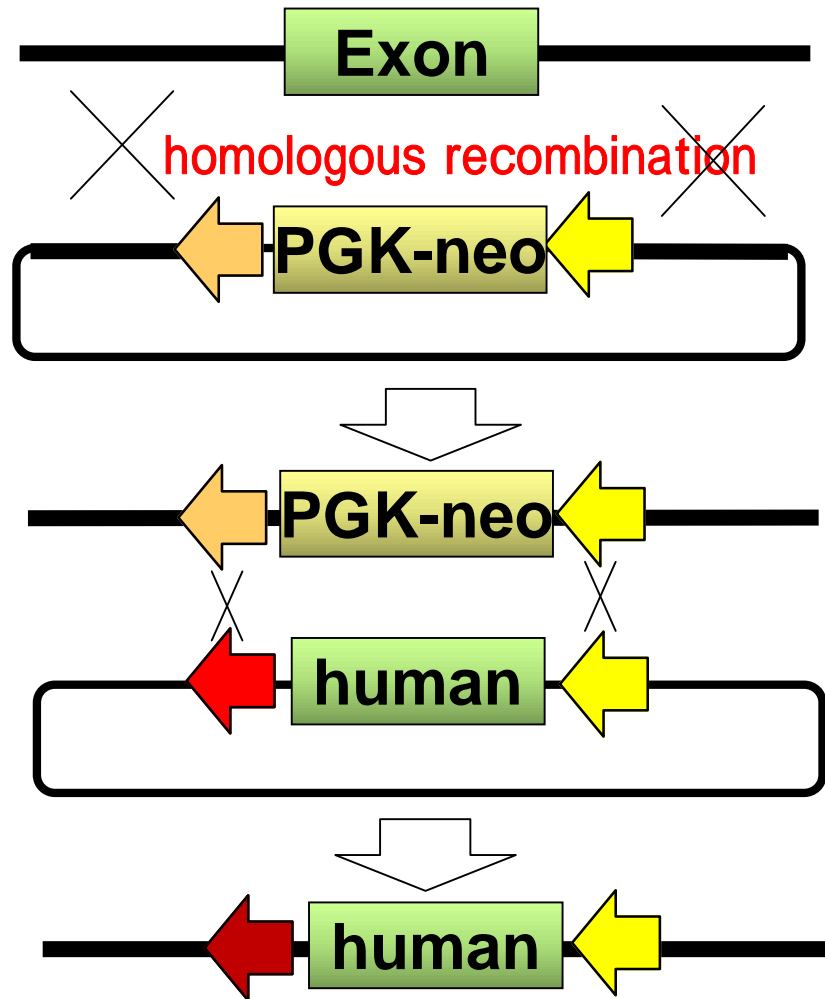


# .Research Topics

# Knockout Technology



Third Generation: Gene Replacement



Forth Generation: Humanized Mouse

1 . Gene level



2 . Cell level



3 . Tissue/organ level





**Sauer, B. and McDermott, J. DNA recombination with a heterospecific Cre homolog identified from comparison of the pac-c1 regions of P1-related phages. Nucic Acid. Res. 32:6086-6095, 2004**

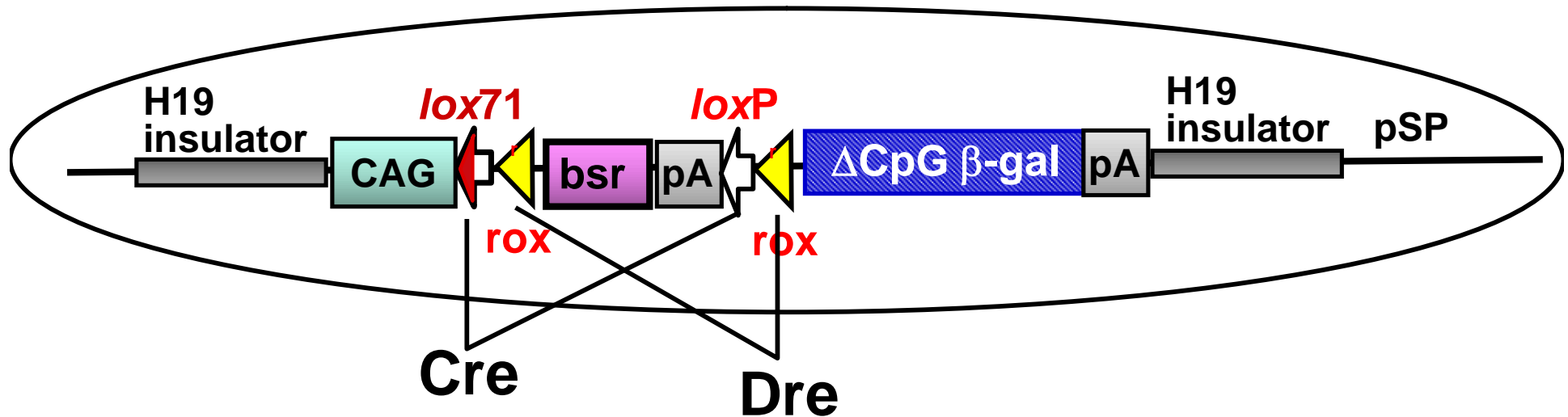
**rox: 5' TAACTTTAAATAATGCCAATTATTTAAAGTTA**  
**3' ATTGAAATTTATTACGGTTAATAAATTTCAAT**

**lox: 5' ATA ACTTCGTATAATGTATGCTATACGAAGTTAT**  
**3' TATTGAAGCATATTACATACGATATGCTTCAATA**

# Monitoring ES cell and Dre expression vector



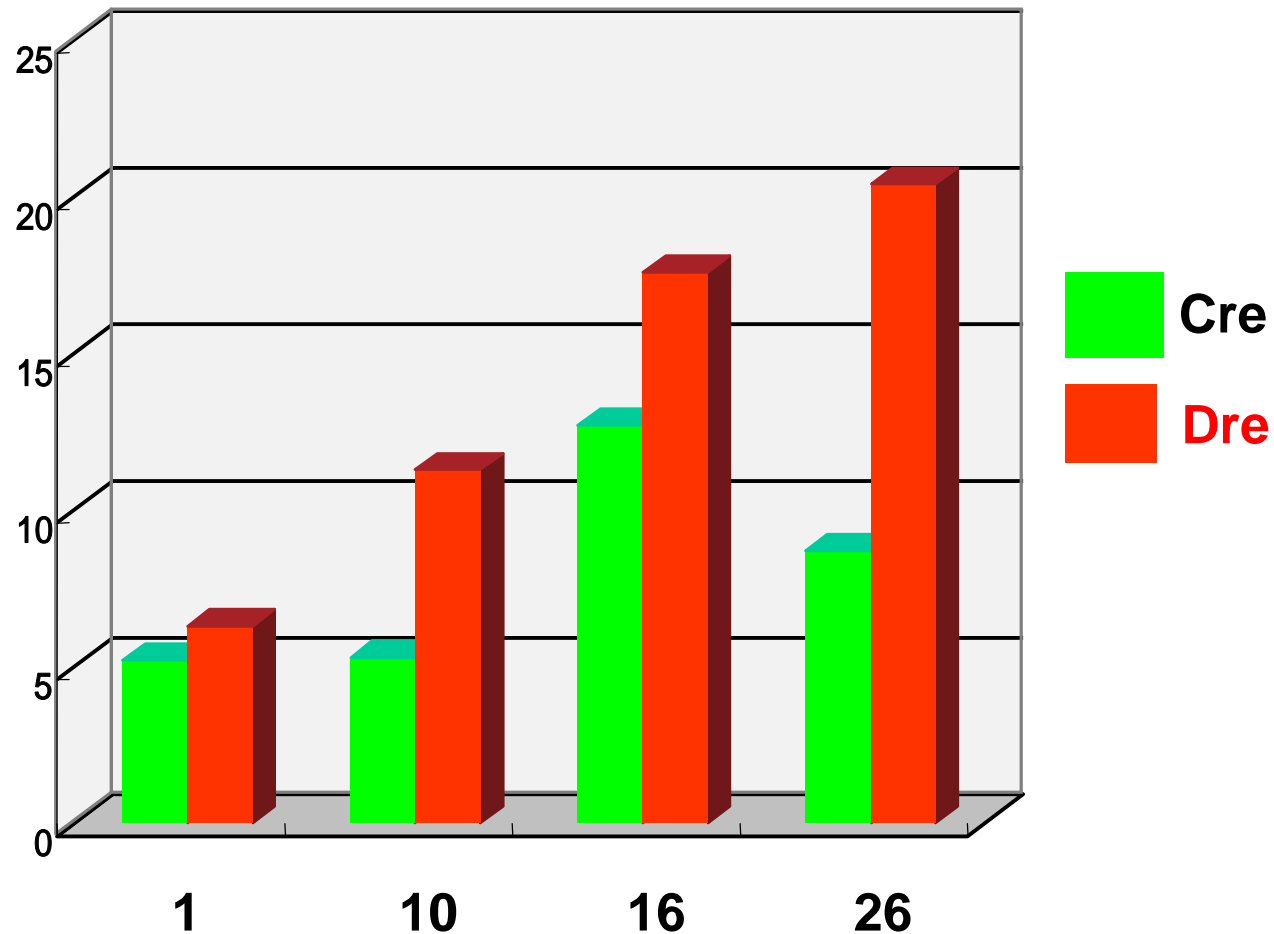
## Monitoring ES cell



## Dre expression vector



# Number of recombinant colonies



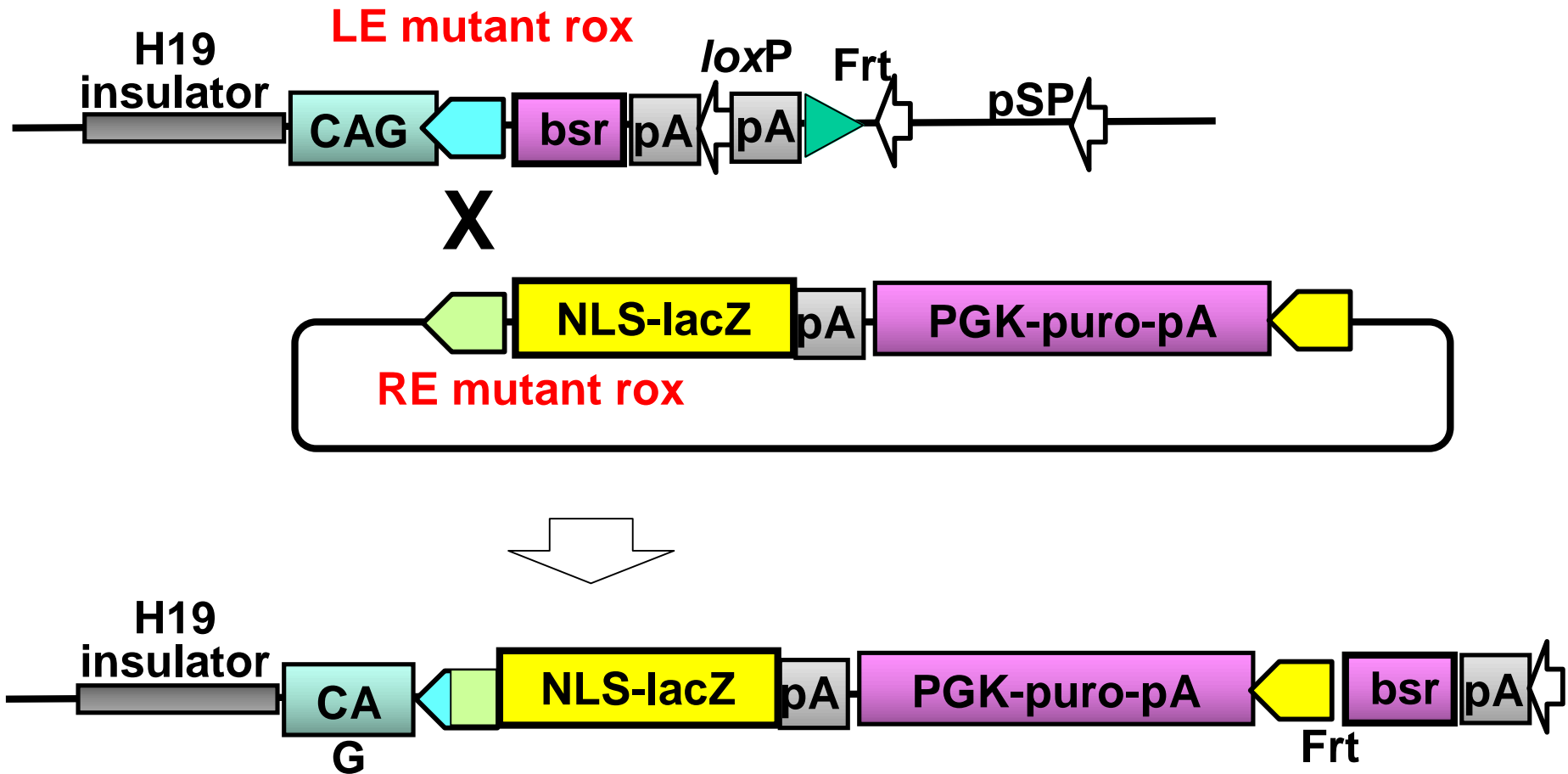
Recombination efficiency by **Dre** is the same as or even better than that by **Cre**.

## LE mutant rox sites



<b>rox:</b>	5'	TAAC	TTAA	ATAAT	GCCA	ATTAT	TTAA	AGTTA		
	3'	ATTG	AAAT	TATT	ACGG	TTAAT	AAAT	TTCAAT		
<b>L1 rox:</b>	5'	TAT	G	TTAA	ATAAT	GCCA	ATTAT	TTAA	AGTTA	
	3'	AT	AC	AAAT	TATT	ACGG	TTAAT	AAAT	TTCAAT	
<b>L2 rox:</b>	5'	TAAC	TACT	ATAAT	GCCA	ATTAT	TTAA	AGTTA		
	3'	ATTG	ATGA	TATT	ACGG	TTAAT	AAAT	TTCAAT		
<b>L3 rox:</b>	5'	TAT	AG	TTAA	ATAAT	GCCA	ATTAT	TTAA	AGTTA	
	3'	AT	ATC	AAT	TATT	ACGG	TTAAT	AAAT	TTCAAT	
<b>L4 rox:</b>	5'	T	GAC	AT	TTA	ATAAT	GCCA	ATTAT	TTAA	AGTTA
	3'	ACT	GTAA	A	TATT	ACGG	TTAAT	AAAT	TTCAAT	

# Experimental System



## Expression of the NLS-lacZ



# Insertion Frequency



	R1(%)	R2(%)	R3(%)	R4(%)
L1	6.95	7.25	4.36	8.41
L2	9.62	12.93	14.58	16.75
L3	10.16	11.21	11.54	14.91
L4	8.70	9.10	13.21	12.09



# Question and Answer Session



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