

Tables and Figures

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Disclosure

None

Tables and Figures

- The purpose of tables and figures is to report data too numerous or complicated to be described adequately in the text and/or to reveal trends or patterns in the data.
- Tables and figures are critical. If readers go beyond the abstract, they are likely to examine the tables and figures next.

효과적인 표와 그림 작성을 위한 지침

1. 연구결과 중 어떤 자료를 제시할 것인지, 그리고 자료를 본문 (text), 표, 그림 중 어디에서 제시하는 것이 가장 좋을지를 결정한다.
2. 본문에서 적절하게 다루지 못한 핵심적인 정보만을 표나 그림으로 제시함으로써, 표와 그림의 수를 제한한다.
3. 연구결과가 가설에 부합하건 그렇지 않든 간에 서론에서 제기한 의문에 관련된 결과만을 제시하여야 한다.
4. 표와 그림은 본문을 참조하지 않더라도 그 자체만으로도 이해할 수 있게 작성을 하여야 한다.

효과적인 표와 그림 작성을 위한 지침

5. 각각의 표와 그림은 본문에서 인용되는 순서대로 번호를 부여한다. 그리고 표와 그림은 각각 따로 번호를 매긴다.
6. 표와 그림은 원고의 줄거리, 즉 연구방법 및 결과를 자연스럽게 표현할 수 있도록 순차적으로 정렬한다.
7. 목표 저널의 저자설명서(Instruction to Authors)를 참조해서 표와 그림이 위치해야 할 곳을 확인한다. 대부분의 저널에서 표와 그림은 본문과는 분리해서 독립된 파일로 준비하도록 하고 있고, 일부에서는 각각의 표와 그림을 참고문헌 다음에 독립적인 페이지에 위치하도록 하고 있다.

효과적인 표와 그림 작성을 위한 지침

8. 만약 목표 저널이 본문 중간에 표와 그림을 삽입하도록 되어있다면, 표나 그림 중간에 페이지가 나누어져서는 안 된다 (no page break). 또한 표나 그림 주변으로 본문이 겹쳐져서도 안 된다.
9. 모든 표와 그림이 원고의 본문에 인용이 되었는지 확인한다.
10. 이미 출판된 표나 그림을 사용하고자 할 때는 판권소유자 (copyright hold)에게 허락을 받고, 그 출처를 표시하여야 한다.
11. 표 제목과 그림설명은 과거시제 (past tense)로 작성한다.
12. 표 제목과 그림설명에는 단순히 결과의 요약이나 해석이 아니라, 표 또는 그림 안에 무엇이 제시되었는가에 대한 정보가 있어야 한다.

Tables

언제 표를 사용할 것인가?

- Use to make an article more readable by removing numeric data from the text, to synthesize existing literature, to explain variables, or to present the wording of survey questions.

언제 표를 사용할 것인가?

Table 1. Effect of aeration on growth of *Streptomyces coelicolor*

| Temp (°C) | No. of expt | Aeration of growth medium | Growth |
|-----------|-------------|---------------------------|-----------------|
| 24 | 5 | + ^b | 78 ^a |
| 24 | 5 | - | 0 |

^aAs determined by optical density (Klett units).

^bSymbols: +, 500-ml Erlenmeyer flasks were aerated by having a graduate student blow into the bottles for 15 min out of each hour; -, identical test conditions, except that the aeration was provided by an elderly professor.

- Aeration of the growth medium was essential for the growth of *Streptomyces coelicolor*. At room temperature (24°C), no growth was evident in stationary (unaerated) cultures, whereas substantial growth (OD, 78 Klett units) occurred in aerated cultures.

언제 표를 사용할 것인가?

Table 2. Effect of temperature on growth of oak (*Quercus*) seedlings

| Temp (°C) | Growth in 48 h (mm) |
|-----------|---------------------|
| -50 | 0 |
| -40 | 0 |
| -30 | 0 |
| -20 | 0 |
| -10 | 0 |
| 0 | 0 |
| 10 | 0 |
| 20 | 7 |
| 30 | 8 |
| 40 | 1 |
| 50 | 0 |
| 60 | 0 |
| 70 | 0 |
| 80 | 0 |
| 90 | 0 |
| 100 | 0 |

- The oak seedlings grew at temperature between 20-40°C; no measurable growth occurred at temperature below 20°C or above 40°C.

언제 표를 사용할 것인가?

Table 3. Oxygen requirement of various species of *Streptomyces*

| Organism | Growth under aerobic conditions ^a | Growth under anaerobic conditions |
|-----------------------------|--|-----------------------------------|
| <i>Streptomyces griseus</i> | + | - |
| <i>S. coelicolor</i> | + | - |
| <i>S. nocolor</i> | - | + |
| <i>S. everycolor</i> | + | - |
| <i>S. greenicus</i> | - | + |
| <i>S. rainbowensky</i> | + | - |

^aSee Table 1 for explanation of symbols. In this experiment, the cultures were aerated by a shaking machine (New Brunswick Shaking Co., Scientific, NJ).

- *S. griseus*, *S. coelicolor*, *S. everycolor*, and *S. rainbowensky* grew under aerobic conditions, whereas *S. nocolor* and *S. greenicus* required anaerobic conditions.

표의 구성요소 및 배열

Table 1 Metabolic and physiologic variables

| Variable | Control | DM | <i>P</i> value |
|---|---------------|---------------|----------------|
| Initial weight (g) | 286 ± 7.1 | 288.7 ± 6.9 | 0.09 |
| Final weight (g) | 467.2 ± 26.3 | 240.9 ± 44.5 | <0.0001 |
| Initial fasting glucose (mg/dL) | 82.3 ± 4.4 | 81.2 ± 5.5 | 0.40 |
| Initial postprandial glucose (mg/dL) | 92.8 ± 9.9 | 90 ± 10.5 | 0.35 |
| Final fasting glucose (mg/dL) | 96 ± 10.1 | 429.6 ± 94.0 | <0.0001 |
| Final postprandial glucose (mg/dL) | 109.7 ± 11.1 | 570.8 ± 55.2 | <0.0001 |
| MAP (cm H ₂ O) | 142.5 ± 5.8 | 137.5 ± 10.3 | 0.35 |
| Maximal ICP/MAP* | | | |
| 1.0V | 0.80 ± 0.09 | 0.58 ± 0.11 | <0.0001 |
| 2.5V | 0.93 ± 0.14 | 0.62 ± 0.13 | <0.0001 |
| 5.0V | 0.93 ± 0.07 | 0.92 ± 0.03 | 0.39 |
| Total ICP/MAP* | | | |
| 1.0V | 43.1 ± 6.3 | 33.7 ± 9.8 | <0.0001 |
| 2.5V | 49.1 ± 7.5 | 33.4 ± 8.6 | <0.0001 |
| 5.0V | 59.2 ± 5.7 | 56.9 ± 3.6 | 0.10 |
| Slope (S80)/MAP* | | | |
| 1.0V | 0.023 ± 0.003 | 0.007 ± 0.002 | <0.0001 |
| 2.5V | 0.042 ± 0.004 | 0.012 ± 0.004 | <0.0001 |
| 5.0V | 0.050 ± 0.006 | 0.049 ± 0.004 | 0.49 |

*Ratio of maximal ICP, total ICP, and slope (S80) to MAP were calculated to normalize for variations in systemic blood pressure.

DM = diabetes mellitus; ICP = intracavernous pressure; MAP = mean arterial pressure; Slope (S80) = slope for the ICP to reach 80% of maximal ICP; Total ICP = area under the curve from the beginning of cavernous nerve stimulation until ICP returned to baseline or prestimulation pressure.

- Title
- Column headings: avoid using terms such as Group A, Group B.
- Row headings: units
- Data
- Footnotes
 - keep footnotes to a minimum
 - sequence: top to bottom, left to right
 - numbering
 - *, †, ‡, §, ¶, ||
 - ** , ††, ‡‡, § § , ¶ ¶ , || ||.

좋은 표 제목과 나쁜 표 제목

- The title should be sufficiently descriptive to tell the reader what will appear in the table.

Table 5. Poor titles and better titles.

| Poor Titles | Better Titles |
|--|--|
| Characteristics of subjects | Characteristics of the 154 subjects at the time of enrollment |
| Effects of treatment of hypertension | Comparison of diuretic therapy versus placebo among 283 patients with hypertension: 6-month results |
| Predictors of quality of life | Factors associated with quality of life among patients with cirrhosis: multivariate models |
| Independent ($P < 0.05$) predictors of quality of life using logistic regression following step-wise selection procedures, using the criteria of reference 6 | Factors associated with differences in quality of life among patients with cirrhosis: multivariate models. |

자료의 배열

Table 6

Selected Hemodynamic Measurements
(Mean \pm SD) at Baseline and during Follow-up,
in 58 Subjects with Hypertension

| Measurement | Week of Treatment* | | |
|----------------------------------|--------------------|--------------|--------------|
| | Baseline | 1 | 6 |
| Heart rate (per minute) | 76 \pm 12 | 68 \pm 8 | 65 \pm 7 |
| Systolic blood pressure (mm Hg) | 162 \pm 21 | 142 \pm 18 | 138 \pm 14 |
| Diastolic blood pressure (mm Hg) | 96 \pm 12 | 82 \pm 10 | 80 \pm 6 |

* All measures showed significant ($P < 0.01$) differences from baseline at weeks 1 and 6.

표의 유형

- When considering whether to include a particular table, it is useful to ask yourself what message that table is meant to convey. The purpose of the table will guide the table's format.

Common Types of Tables, and the Messages That Might Convey

Lists (of facts, diagnoses, and criteria)

The 10 most common mnemonics used by medical students

Characteristics of subjects

Clinical characteristic of patients with painless hematuria

What happened to the subjects during the study?

Outcomes during 6-year follow-up in 241 patients after first myocardial infarction

Comparisons of groups of subjects

Comparison of demographic characteristics of cases and control

Predictors of what happened to the subjects

Factors associated with falling asleep in grand rounds

Results of a complicated multivariate analysis

Independent predictors of mortality in a cohort of 834 factory workers

특정 사실, 진단방법, 기준에 대한 목록을 표로 작성하는 경우

Table 7

Common Urinary Tract Pathogens
(Alphabetical)

Candida species
Enterococcus species
Escherichia coli
Proteus mirabilis
Staphylococcus aureus

- List the pathogens by frequency, subcategorized by type.
- Avoid using percents of percents.

Table 8

Frequency of Pathogens in
840 Women with Lower
Urinary Tract Infections

| Type of Pathogen | Frequency (%) |
|---------------------------------|---------------|
| Gram-negative bacteria | 63 |
| <i>Escherichia coli</i> | 55 |
| <i>Proteus mirabilis</i> | 4 |
| Gram-positive bacteria | 26 |
| <i>Staphylococcus aureus</i> | 13 |
| <i>Enterococcus</i> species | 9 |
| <i>Candida</i> species | 3 |
| Other or no organism identified | 8 |

환자의 특성을 표로 작성하는 경우

- Age, sex, race, disease stage, and selected risk factors, etc.

Table 9

Characteristics of the Subjects*

| | | |
|---------------------|-----------------------|----------|
| Male | 594 | (49.75%) |
| Female | 600 | (50.25%) |
| Age | 64.47 ± 5.23 | |
| History of diabetes | 103 | (8.63%) |
| History of CHD | 56 | (4.69%) |
| Body weight | 74.1 ± 17.3 | |
| Shoe size | 9.2 ± 2.1 | |
| Calories per month | 62, 125.4 ± 15, 781.2 | |

Table 10

Characteristics of the 1,194 Subjects Enrolled in the Better Eating Trial (BET)

| Characteristic | N (%) or Mean ± SD |
|-----------------------------------|--------------------|
| Male sex | 594 (50) |
| History of diabetes | 103 (9) |
| History of coronary heart disease | 56 (5) |
| Age (years) | 64 ± 5 |
| Body weight (kg) | 74 ± 17 |
| Calories per day | 2, 070 ± 530 |

Problems

- Title, proportion of subjects, extraneous variables, undefined abbreviation (CHD), no column headings, no units, etc.

특정 기간 동안 발생한 결과를 표로 작성하는 경우

- Cohort studies and clinical trials that follow a group of subjects for a period of time.

Mortality during 3.5 Years of Follow-up in 682 Participants

| Cause of Death | Number (%) |
|------------------------|-------------------|
| Cardiovascular disease | 60 (8.8) |
| Myocardial infarction | 34 (5.0) |
| Anterior | 18 (2.6) |
| Inferior | 12 (1.8) |
| Stroke | 17 (2.5) |
| Cancer | 41 (6.0) |
| Lung | 12 (1.8) |
| Colon | 10 (1.5) |
| Breast | 9 (1) |
| Other | 15 (2.2) |
| Total | 116 (17.0) |

TABLE 6-15 Causes of 116 Deaths during 3.5 Years of Follow-up in 682 Participants

| Cause of Death | N (% of all deaths) |
|------------------------|---------------------|
| Cardiovascular disease | 60 (52) |
| Myocardial infarction | 34 (29) |
| Anterior | 18 (17) |
| Inferior | 12 (12) |
| Stroke | 17 (15) |
| Cancer | 41 (35) |
| Lung | 12 (10) |
| Colon | 10 (9) |
| Breast | 9 (8) |
| Other | 15 (13) |

- Emphasizing the proportions of death due to each cause, rather than absolute risk of each cause.

다변량 변수 결과를 표로 작성하는 경우

- Regression models: regression coefficients, standard errors, slopes, partial correlation coefficients, and P values among them.
- The primary task is to present the effect of predictor (ex., CRP level) on the outcome of interest (ex, coronary heart disease).
- Relative risk and 95% confidence interval should be provided.

다변량 변수 결과를 표로 작성하는 경우

Table 11

Independent Predictors of Coronary Heart Disease among 2,124 Middle-aged Subjects, Using Logistic Regression Models*

| Predictor | Regression Coefficient | Standard Error | <i>P</i> |
|-------------------------|-------------------------------|-----------------------|-----------------|
| Sex | 0.51 | 0.22 | 0.01 |
| Age | 0.05 | 0.01 | < 0.0001 |
| Serum cholesterol | 0.3 | 0.15 | 0.05 |
| Systolic blood pressure | 0.7 | 0.3 | 0.02 |
| Smoking | 1.1 | 0.3 | < 0.0001 |

- Problems: Most readers will have no idea of the meaning of regression coefficients or standard errors, do not understand these statistical concept, and will not know the units of change in the predictor.

다변량 변수 결과를 표로 작성하는 경우

Table 12

Independent Predictors of Coronary Heart Disease among 2,124 Middle-aged Subjects

| Predictor | Relative Risk* | 95% Confidence Interval | P |
|--|-----------------------|--------------------------------|----------|
| Male sex | 1.7 | 1.1 – 2.6 | 0.01 |
| Age (per 10 years) | 1.6 | 1.4 – 2.0 | < 0.0001 |
| Serum cholesterol (per 20 mg/dL) | 1.3 | 1.0 – 1.8 | 0.05 |
| Systolic blood pressure (per 10 mm Hg) | 2.0 | 1.1 – 3.6 | 0.02 |
| Current smoker (vs. never smoked) | 3.0 | 1.7 – 5.4 | < 0.0001 |

* Relative risks approximated with odds ratios from a logistic regression model.

표 작성 : 예제

- A table that compares pediatric patients less than 2 years old undergoing surgery for congenital abnormalities at two university hospitals (Group I) and three community hospitals (Group II).

| Characteristic | Group I | Group II | <i>P</i> |
|-----------------|---------------------|-------------------|----------|
| Male | 74/112 = 66% | 33/68 = 49% | * |
| Female | 28/112 = 34% | 35/68 = 51% | * |
| CHD | 77/112 = 69% | 50/68 = 74% | NS |
| Cost in dollars | \$29,323 ± \$13,358 | \$31,482 ± 16,552 | NS |
| Age (years) | 0.5 ± 0.5 | 0.6 ± 0.4 | NS |
| Premature | 92/112 = 82% | 43/68 = 63% | * |
| < 32 weeks | 47% | 41% | NS |
| < 28 weeks | 18% | 3% | * |

* $P < 0.05$. NS, nonsignificant.

표 작성 : 예제

- A table that compares pediatric patients less than 2 years old undergoing surgery for congenital abnormalities at two university hospitals (Group I) and three community hospitals (Group II).

TABLE 6.31 Comparison of Characteristics of 180 Children Less Than 2 Years Old Undergoing Surgery for Congenital Abnormalities, at Two University Hospitals and Three Community Hospitals*

| Characteristic | University Hospitals (<i>n</i> = 112) | Community Hospitals (<i>n</i> = 68) | <i>P</i> |
|-------------------------------|---|---|----------|
| | N (%) or Mean ± SD | | |
| Male | 74 (66) | 33 (49) | 0.03 |
| Congenital heart disease | 77 (69) | 50 (74) | > 0.15 |
| Premature birth (< 36 weeks) | 92 (82) | 43 (63) | < 0.01 |
| 28 - 32 weeks | 32 (29) | 26 (38) | > 0.15 |
| < 28 weeks | 20 (18) | 2 (3) | < 0.01 |
| Age (months) | 6.3 ± 6.1 | 7.2 ± 4.6 | > 0.15 |
| Hospital charges (in \$1,000) | 29.3 ± 13.4 | 31.5 ± 16.6 | > 0.15 |

표 작성 : 점검 항목

1. Is the title sufficiently descriptive?
2. Do the rows and columns line up neatly? Is each column centered under its heading? Are there denominators for the column headings? Are the headings boldfaced or italicized? Do the row characteristics have units?
3. Are there any unneeded data, repeated N's, excessive precision, or ambiguous abbreviations? Ask yourself: "Do I need it? Do I need it in such glorious detail? Do I need to abbreviate it?"

표 작성 : 점검 사항

4. Is the meaning of every item obvious without referring to the text?
5. Are all the tables cited in the text? Are they cited in order?
6. After you have completed all your tables, ask if two or more of them can be combined.

Excel ribbon: Home, Insert, Page Layout, Formulas, Data, Review, View, Add-Ins, Acrobat. Font settings: Font face (돋움), size (11), bold/italic/underline. Paragraph settings: alignment, bullet points, indent. Styles: background color, text color, font style. Conditional formatting: conditional formatting, data bars, color scales, icon sets. Language: Korean. Other: clipboard, print, save, undo, redo, zoom, help.

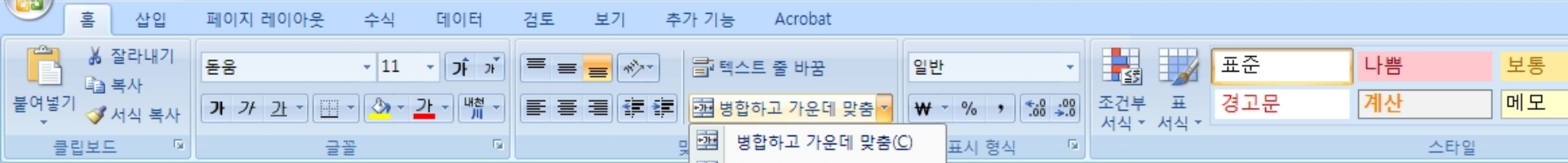
| | A | B | C | D | E | F | G |
|----|---|---|---------------------------------|------------|-------------|-----------------------------|-----------------------------|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | Table 1 Physiologic and metabolic variables | | | | | | |
| 4 | | | | | db/db mice | | |
| 5 | | | Control | | PBS | COMP-Ang1 protein Single | COMP-Ang1 protein Repeat |
| 6 | | | | | | | |
| 7 | | | Body weight (g) | 26.2±1.6 | 45.8±9.2* | 48.7±9.4* | 44.8±11.1* |
| 8 | | | Fasting glucose (mg/dL) | 114.0±7.2 | 411.5±69.8* | 407.2±30.6* | 409.5±35.2* |
| 9 | | | Postprandial glucose (mg/dL) | 180.2±11.1 | 553.3±49.6* | 537.0±58.5* | 547.3.7±75.9* |
| 10 | | | Systemic blood pressure (mm Hg) | | | | |
| 11 | | | SBP | 91.1±5.0 | 92.1±3.6 | 92.4±5.0 | 91.3±3.6 |
| 12 | | | MBP | 69.1±4.5 | 72.1±2.7 | 72.8±4.3 | 71.2±4.0 |
| 13 | | | DBP | 58.6±4.7 | 61.8±2.6 | 63.3±4.6 | 60.9±4.7 |
| 14 | Values are the mean ± standard deviation for N = 6 animals per group. COMP-Ang1 = cartilage oligomeric matrix protein-angiopoietin-1; DBP = diastolic blood pressure; MBP = mean blood pressure; SBP = systolic blood pressure. * <i>P</i> < 0.01 vs control group. | | | | | | |
| 15 | | | | | | | |

Excel ribbon: Home, Insert, Page Layout, Formulas, Data, Review, View, Add-Ins, Acrobat. Font settings: Arial, size 11. Styles: Standard, Bold, Italic, Underline, Paragraph, Alignment, Text, Text Wrapping, Conditional Formatting, Styles. A context menu for '테두리' (Borders) is open, showing options like '아래쪽 테두리(O)', '위쪽 테두리(U)', '왼쪽 테두리(L)', '오른쪽 테두리(R)', '테두리 없음(N)', '모든 테두리(A)', '바깥쪽 테두리(S)', '굵은 상자 테두리(T)', '아래쪽 이중 테두리(B)', '굵은 아래쪽 테두리(H)', '위쪽/아래쪽 테두리(D)', '위쪽/굵은 아래쪽 테두리(C)', '위쪽/아래쪽 이중 테두리(U)', '테두리 그리기', '테두리 그리기(W)', '테두리 눈금 그리기(G)', '테두리 지우기(E)', '선 색(I)', '선 스타일(Y)', '다른 테두리(M)...'.

| | A | B |
|----|---|--------------------------------|
| 1 | | |
| 2 | | |
| 3 | | Table 1 Ph |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | Body weight (g) |
| 8 | | Fasting glucose (mg/dl) |
| 9 | | Postprandial glucose (mg/dl) |
| 10 | | Systemic blood pressure (mmHg) |
| 11 | | |
| 12 | | |
| 13 | | |

| | D | E | F | G |
|--|-------------|-------------|--------------------------|--------------------------|
| | c variables | | | |
| | | db/db mice | | |
| | Control | PBS | COMP-Ang1 protein Single | COMP-Ang1 protein Repeat |
| | 26.2±1.6 | 45.8±9.2* | 48.7±9.4* | 44.8±11.1* |
| | 114.0±7.2 | 411.5±69.8* | 407.2±30.6* | 409.5±35.2* |
| | 180.2±11.1 | 553.3±49.6* | 537.0±58.5* | 547.3.7±75.9* |
| | | | | |
| | 91.1±5.0 | 92.1±3.6 | 92.4±5.0 | 91.3±3.6 |
| | 69.1±4.5 | 72.1±2.7 | 72.8±4.3 | 71.2±4.0 |
| | 58.6±4.7 | 61.8±2.6 | 63.3±4.6 | 60.9±4.7 |

Values are the mean ± standard deviation for N = 6 animals per group. COMP-Ang1 = cartilage oligomeric matrix protein-angiopoietin-1; DBP = diastolic blood pressure; MBP = mean blood pressure; SBP = systolic blood pressure. *P < 0.01 vs control group.



| Table 1 Physiologic and metabolic variables | | | | | | |
|---|---|-----|------------|-------------|-----------------------------|-----------------------------|
| | | | db/db mice | | | |
| | | | Control | PBS | COMP-Ang1 protein Single | COMP-Ang1 protein Repeat |
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| 13 | | DBP | 58.6±4.7 | 61.8±2.6 | 63.3±4.6 | 60.9±4.7 |
| 14 | Values are the mean ± standard deviation for N = 6 animals per group. COMP-Ang1 = cartilage oligomeric matrix protein-angiopoietin-1; DBP = diastolic blood pressure; MBP = mean blood pressure; SBP = systolic blood pressure. *P < 0.01 vs control group. | | | | | |

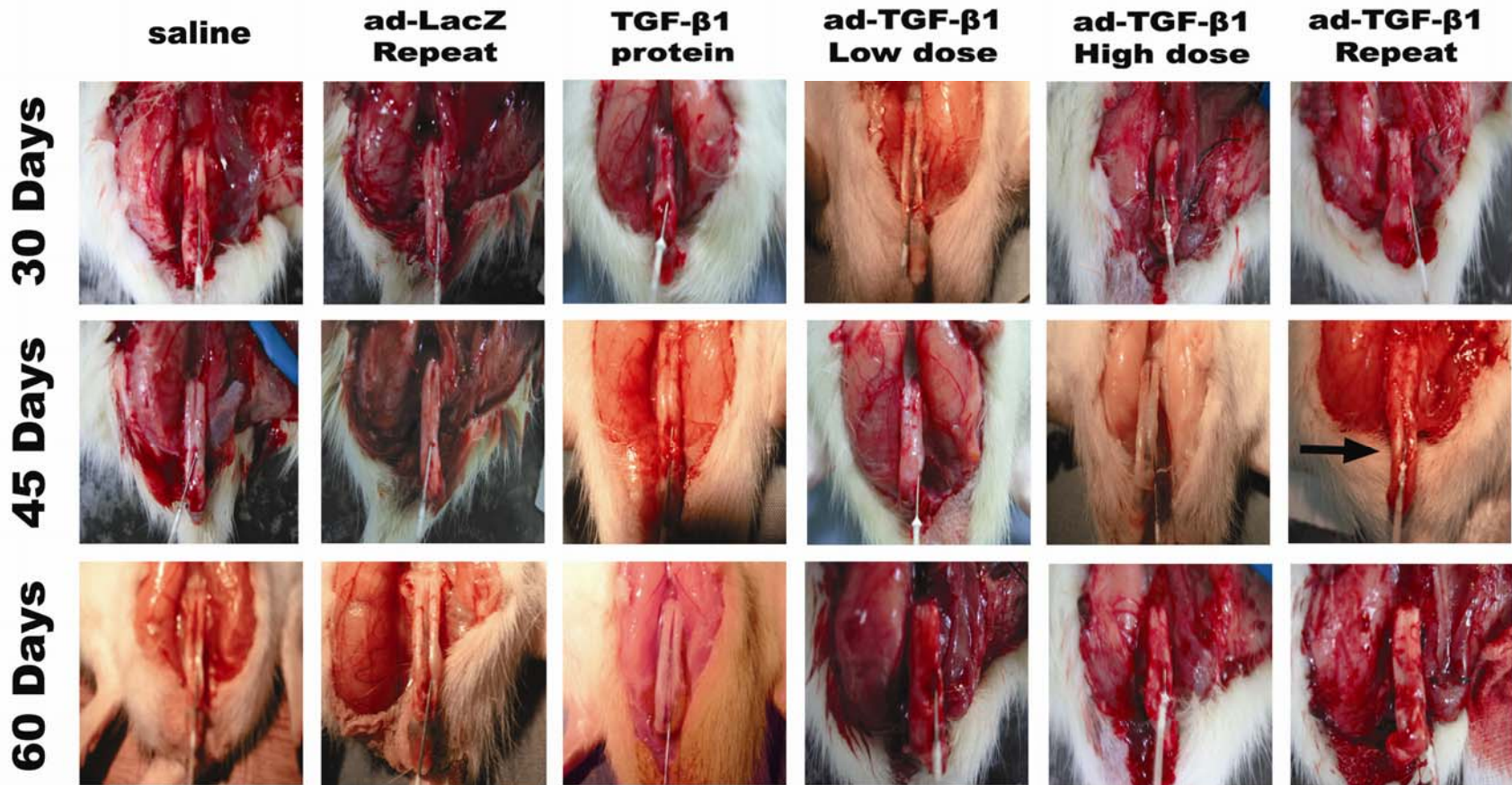
Figures

그림 작성

- One picture is worth a thousand words.
- Provide visual impact and therefore they are often the best way to communicate the primary finding.
- A confusing figure is much worse than no figures at all. If a reader has to spend five minutes getting oriented to your figure, you have not succeeded.

그림 작성

Establishment of Peyronie's disease model with penile curvarure



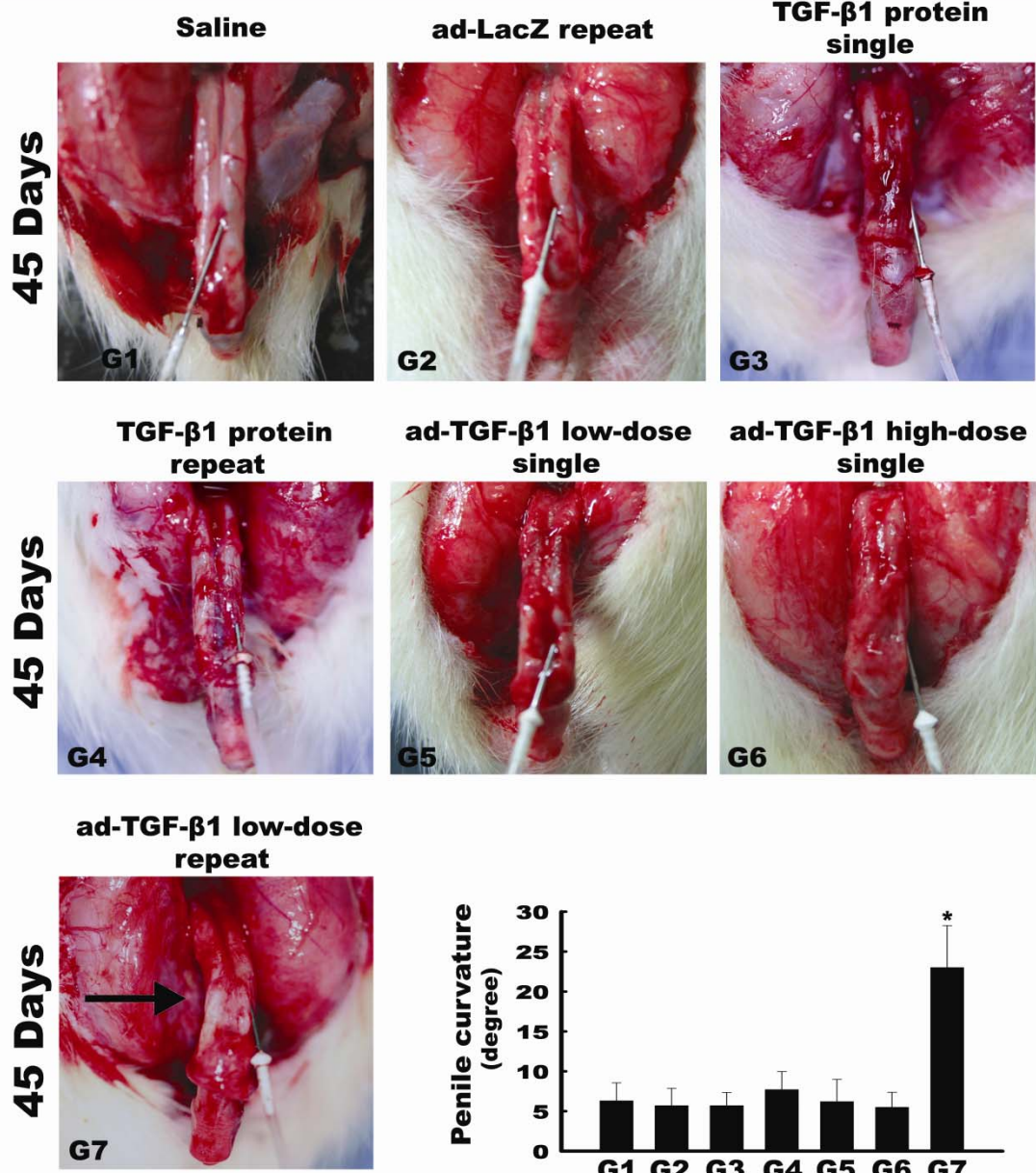


그림 작성 전 점검사항

1. 그림 파일 양식: 예) Tagged Image File (.tif), Encapsulated PostScript (.eps), Joint Photographic Experts Group (.jpeg)
2. 그림의 크기: 예) single column (90 mm width), one and a half column (140 mm width), two column or full page (190 mm width)
3. 그림의 해상도: 예) halftone images (> 300 dpi), combination art (> 500 or 600 dpi), line art (> 1000 or 1200 dpi)
4. 컬러 그림: 예) RGB mode (Red, Green, Blue), CMYK mode (Cyan, Magenta, Yellow, Black)
5. 그림 내 글씨체 및 글자의 최소 크기

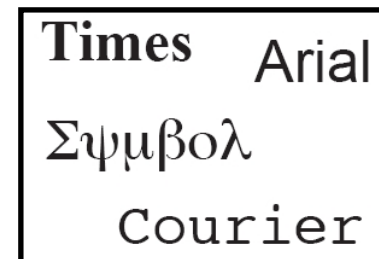
Figures

Preferred and accepted file formats for artwork submission

| Application/ format | Extension | Accepted |
|--|-----------|---|
| Tagged Image File Format | .tif | • Allowed image format |
| Encapsulated PostScript | .eps | • Allowed image format for vector-based images (*and embedded images) |
| Adobe Acrobat Portable Document Format | .pdf | • Allowed format for texts, notes, documents • Any fonts used should be embedded |
| Microsoft Word | .doc | • Allowed format for texts, notes, documents |
| Microsoft Excel | .xls | • Allowed format |
| Microsoft Powerpoint | .ppt | • Allowed format |

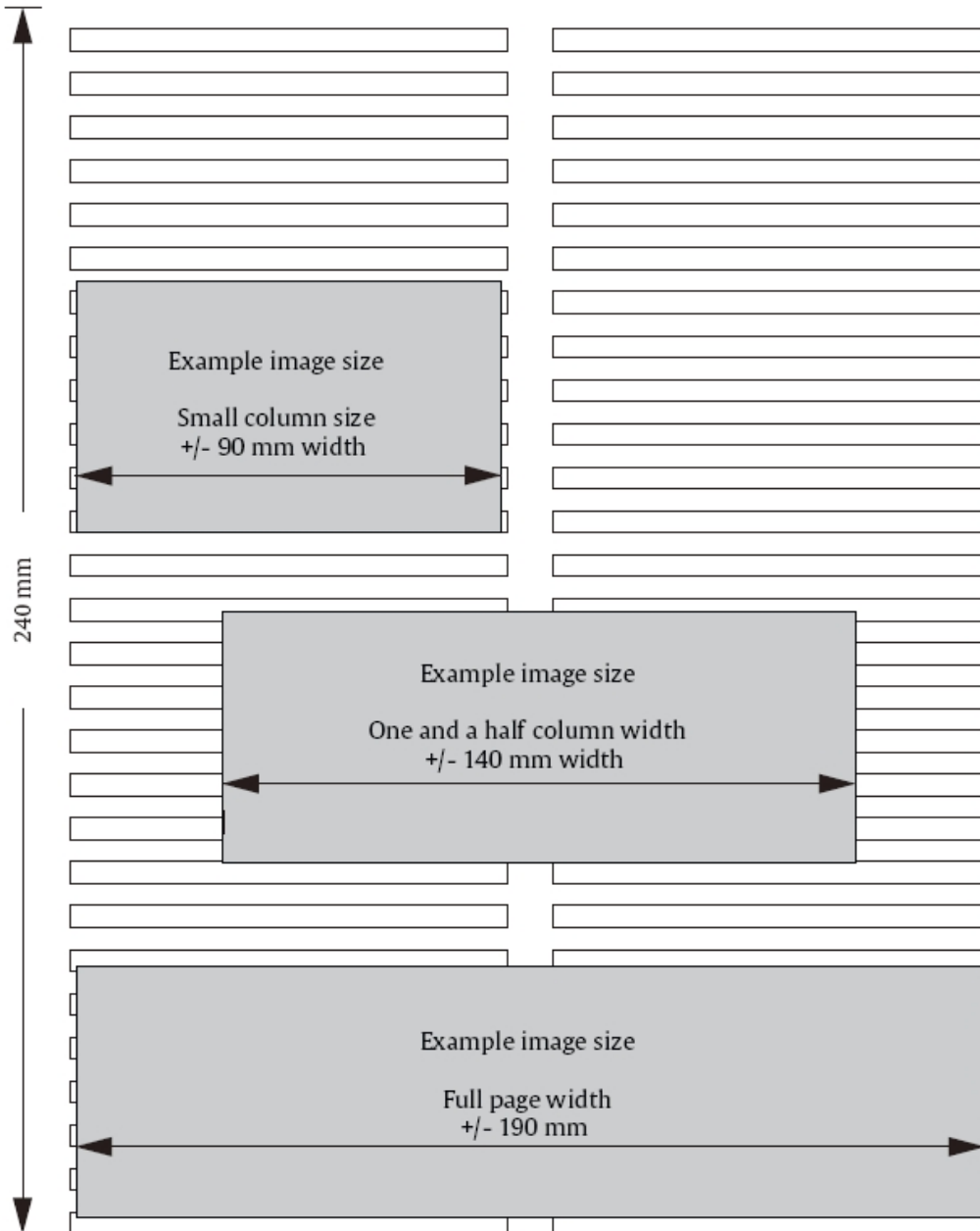
* check resolution

- **TIF**, JPEG
- **Arial**, Courier, Symbol, Times





This general sizing indication can be used for the most Elsevier journals.



Figures

Pixel requirements (width) per print size and resolution for bitmap images

| | image width | A | B | C |
|---------------|-------------|------|------|------|
| Minimal size | 30 mm | 354 | 591 | 1181 |
| Single column | 90 mm | 1063 | 1772 | 3543 |
| 1.5 column | 140 mm | 1654 | 2756 | 5512 |
| Full width | 190 mm | 2244 | 3740 | 7480 |

A: 300 dpi > Halftone images Gray/RGB

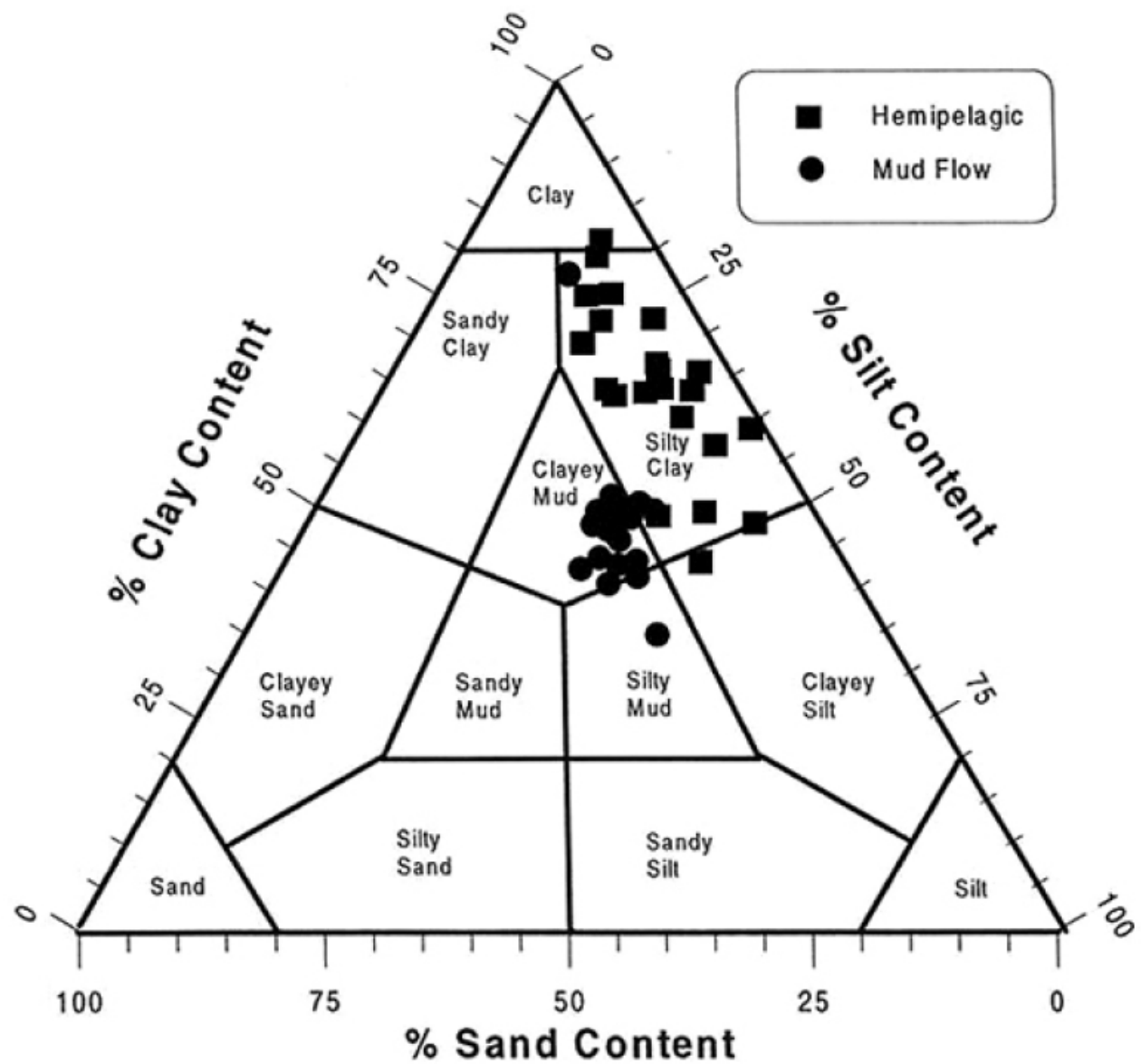
B: 500 dpi > Combination art Gray/RGB

C: 1000 dpi > Line art

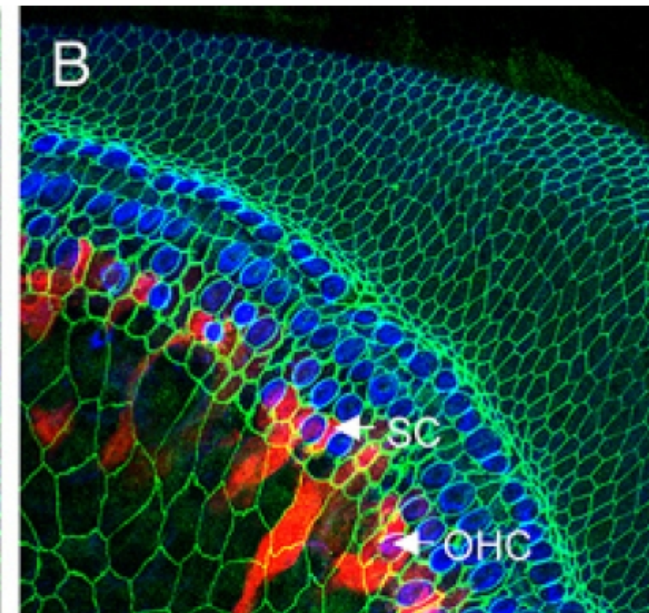
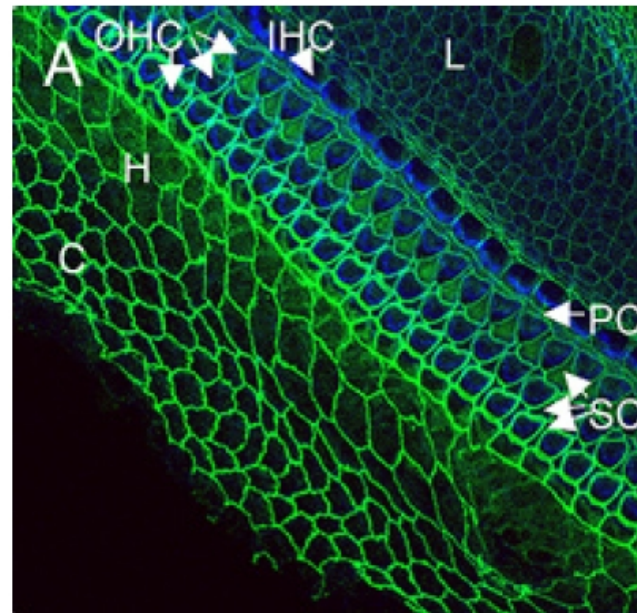
- Or Combination art > 600 dpi; Line art > 1200 dpi

File format: TIFF
Mode: Bitmap
Resolution: 1000 dpi

Sample of a bitmap line image

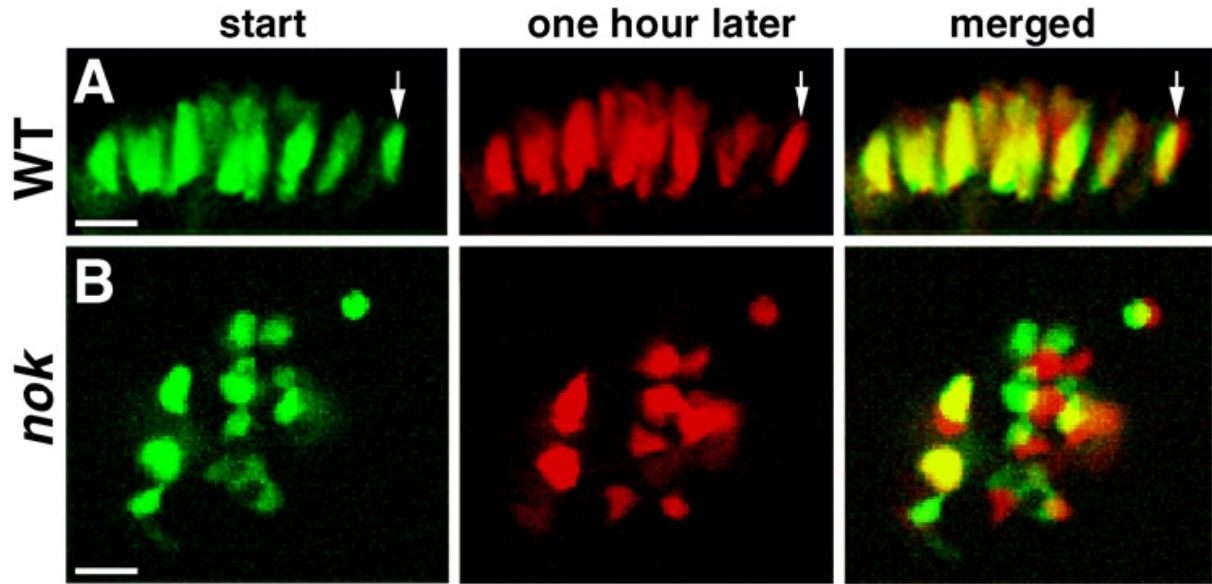


File format: TIFF
Mode: RGB
Resolution: 300 dpi

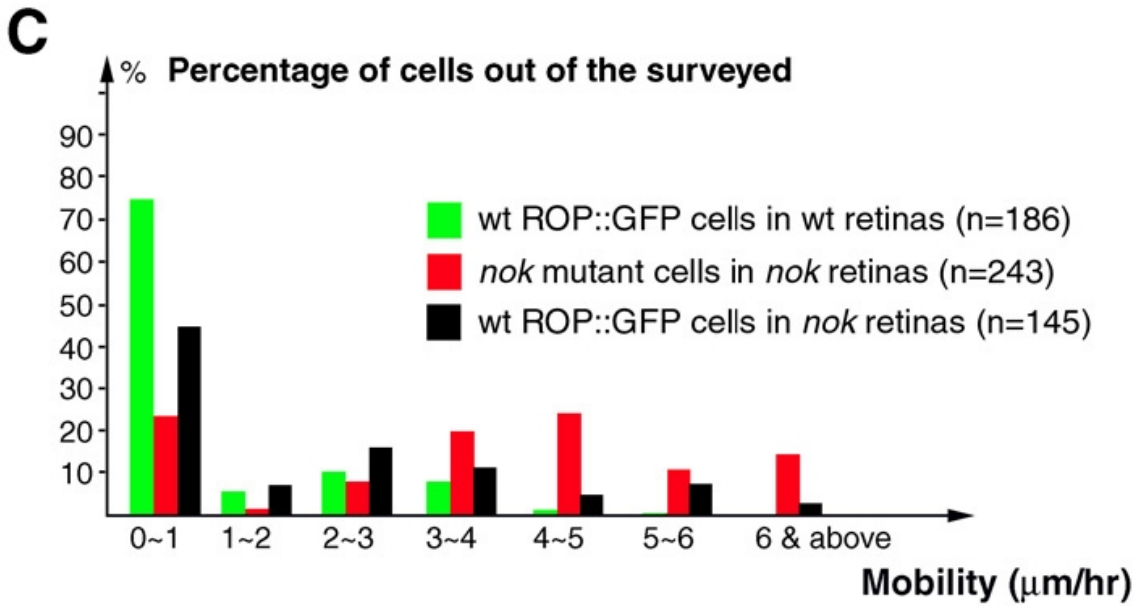


Sample of a RGB image, resolution 300 dpi

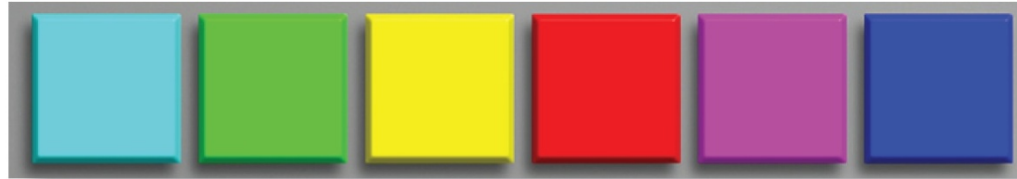
File format: TIFF
 Mode: Grayscale/RGB
 Resolution: 500 dpi



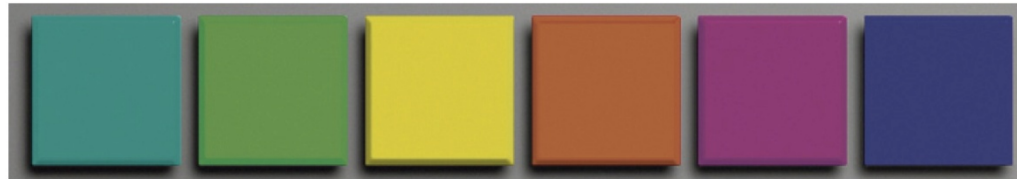
Sample of a combination image in RGB (bitmap), image resolution 500 dpi



RGB



CMYK

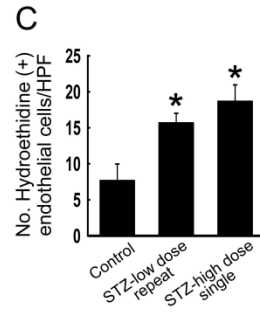
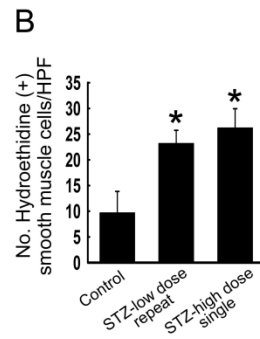
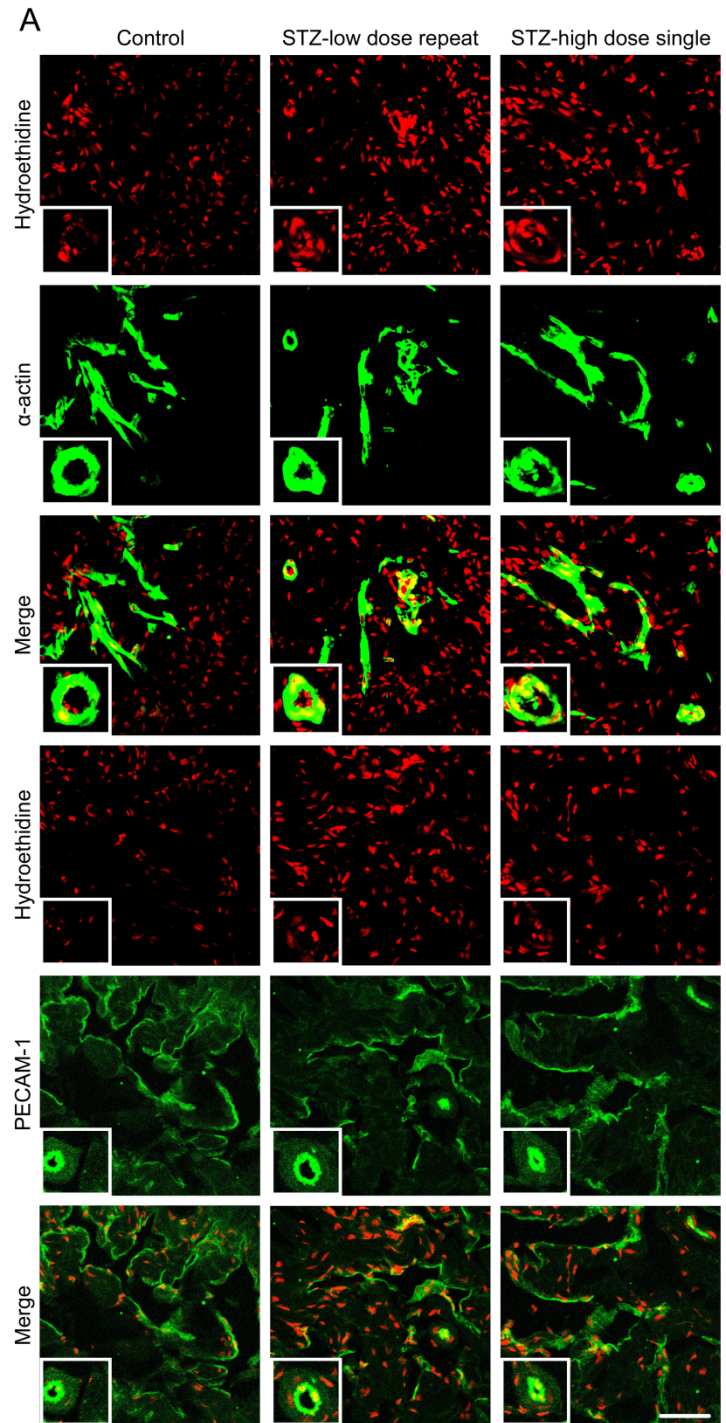


In our constant drive and focus on leading electronic products Elsevier now requires any color artwork to be supplied in the RGB (Red, Green, Blue) color space.

By supplying RGB files we publish your article and artwork online in services such as ScienceDirect.

RGB files will look good when viewed on a monitor, as they contain the largest possible range or 'gamut' of colors.

Usually, the RGB files will be converted to the CMYK (Cyan, Magenta, Yellow, black) color space for the print process. The CMYK color space has a far smaller 'gamut' than RGB, see figure 1.

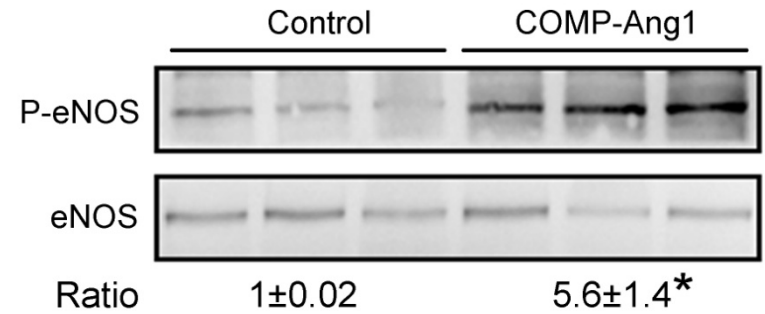
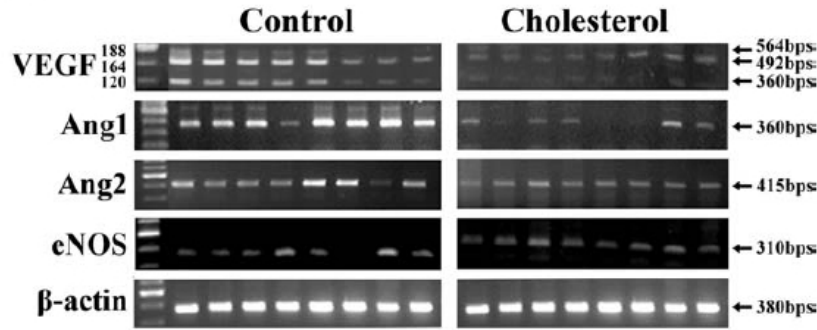


- Photoshop
- Arial
- Regular > Bold
- TIF or JPEG, 600 dpi
- Scale bar
- Bar indicates 50 μ m.

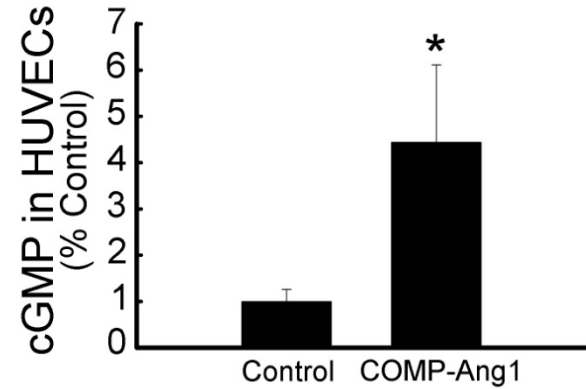
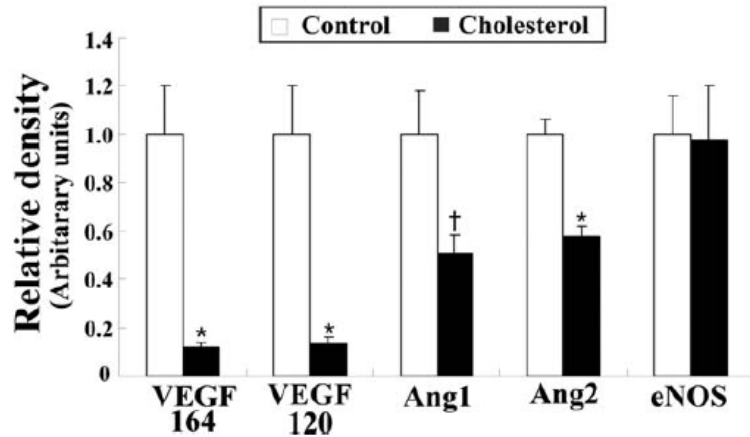
Times New Roman, Bold

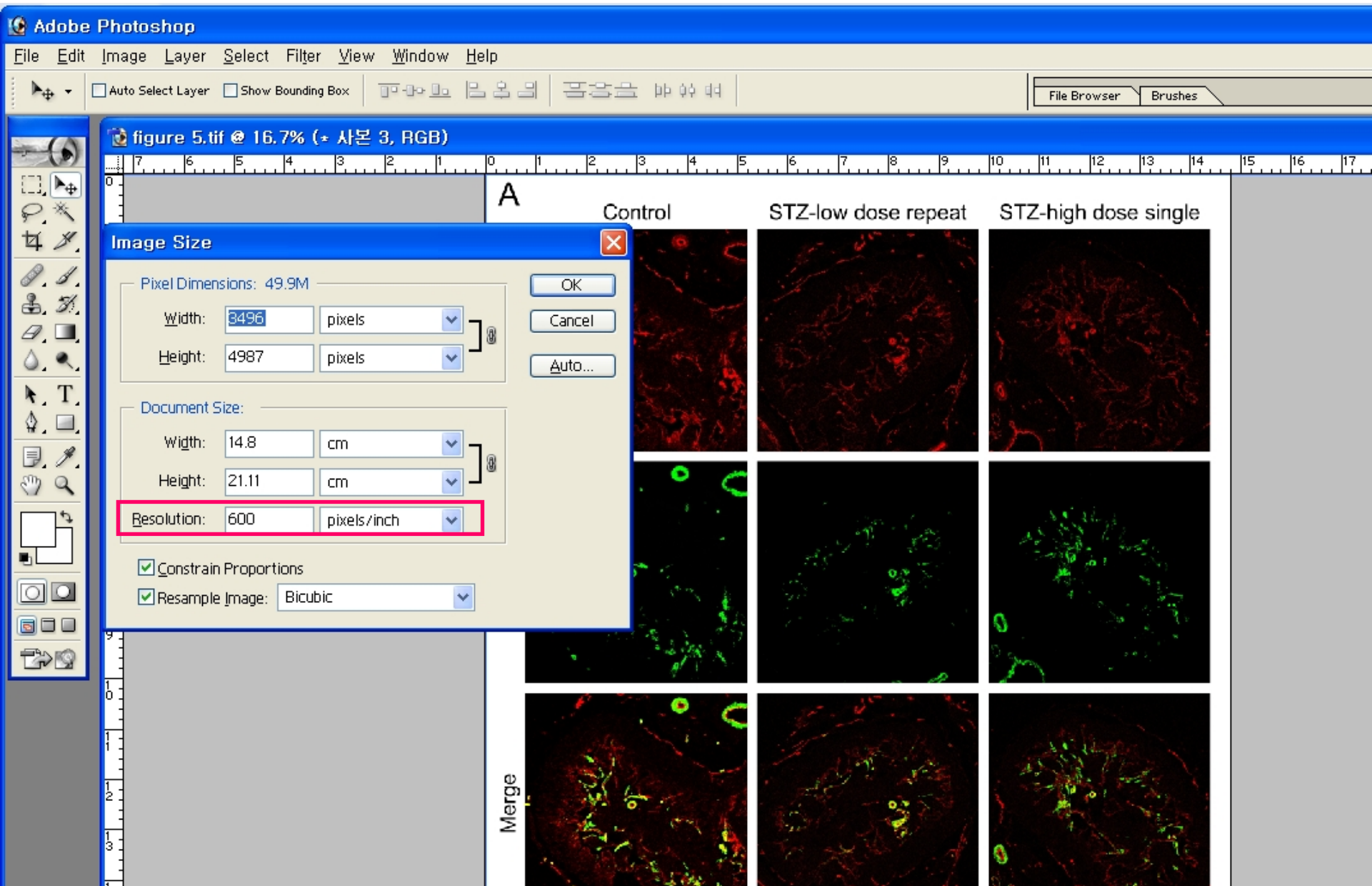
Arial, Regular

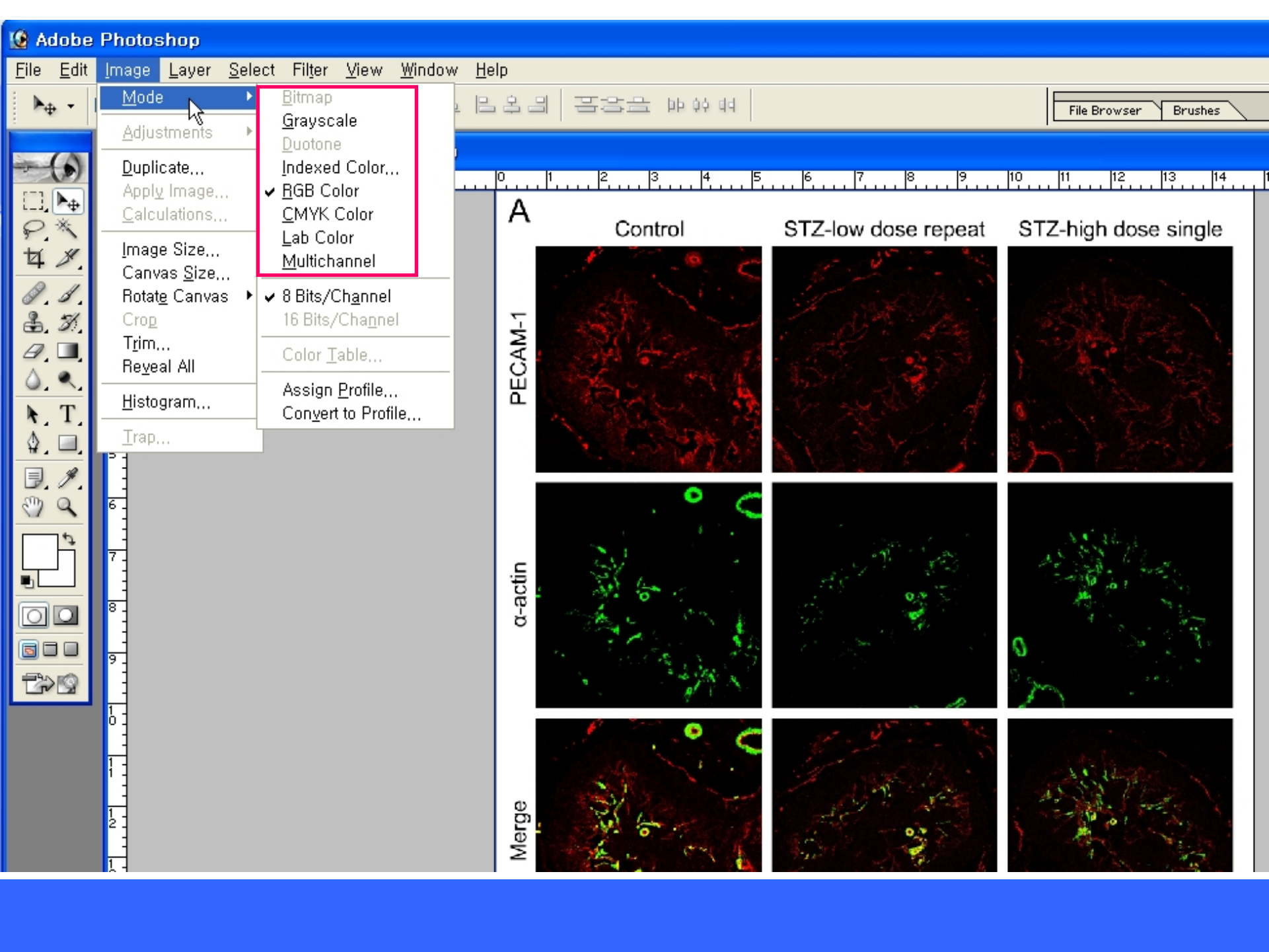
A



B







Mode

- Bitmap
- Grayscale
- Duotone
- Indexed Color...
- RGB Color**
- CMYK Color
- Lab Color
- Multichannel

Adjustments

Duplicate...

Apply Image...

Calculations...

Image Size...

Canvas Size...

Rotate Canvas

- 8 Bits/Channel**
- 16 Bits/Channel

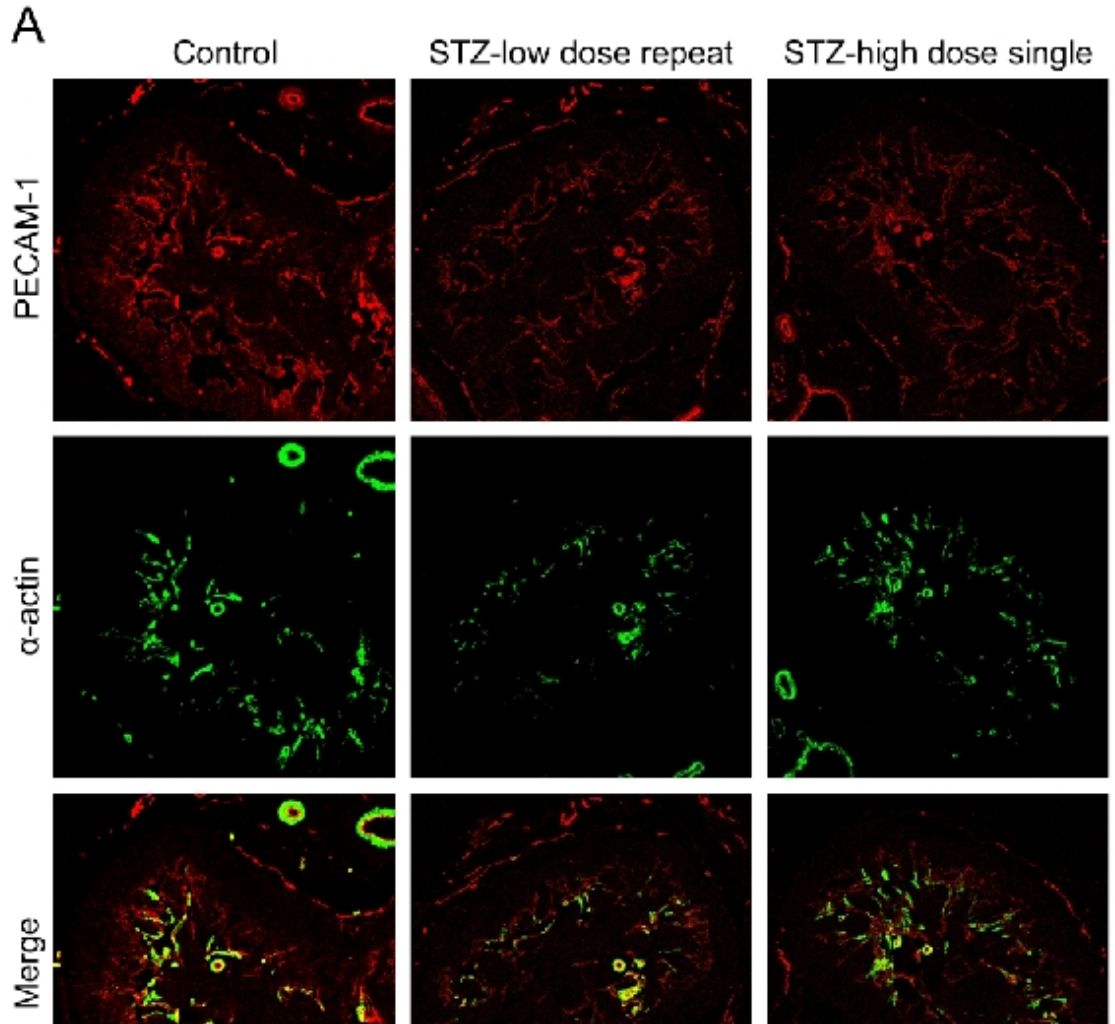
Crop

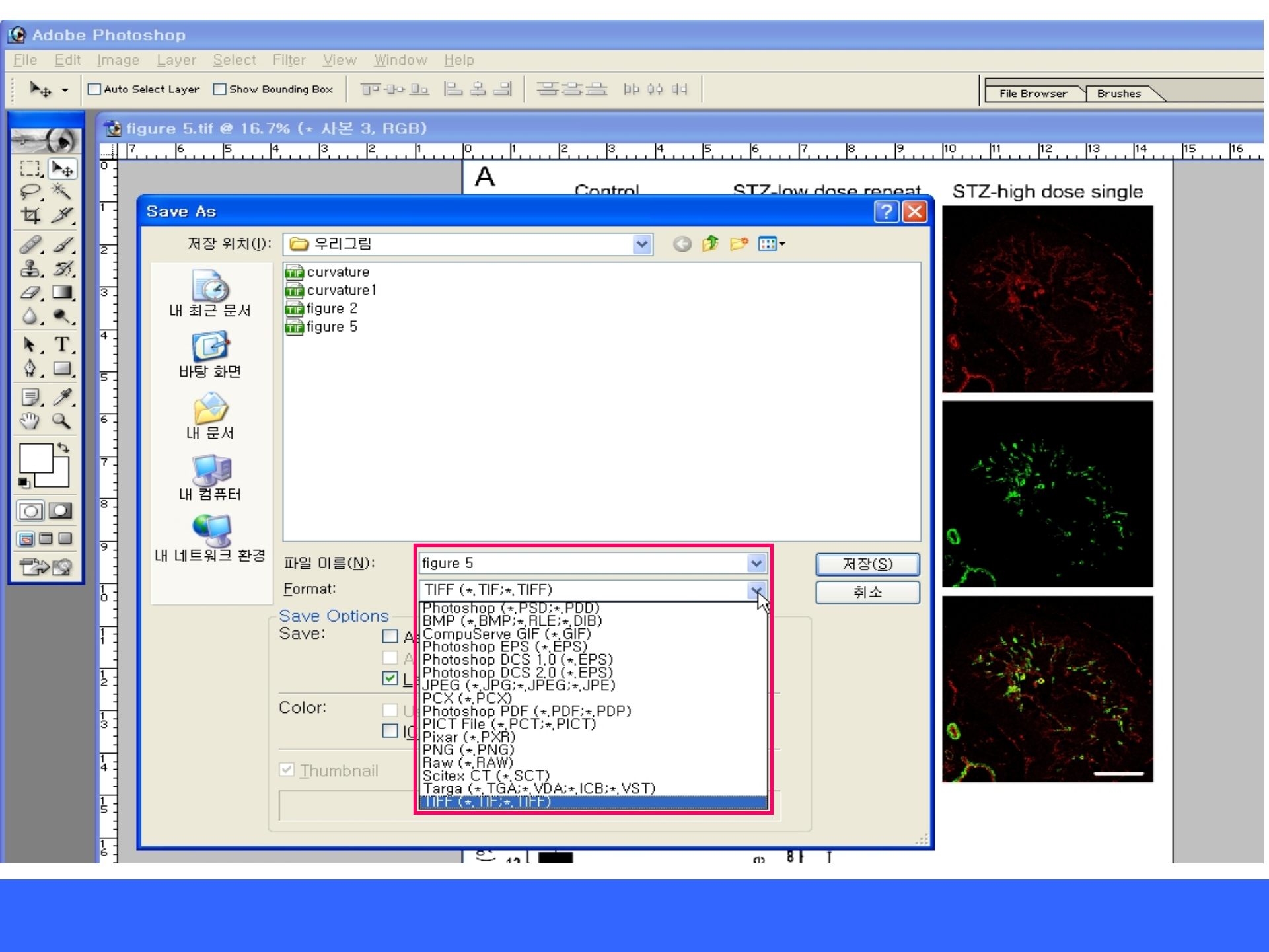
Trim...

Reveal All

Histogram...

Trap...





Save As [?] [X]

저장 위치(I): **우리그림**

- curvature
- curvature1
- figure 2
- figure 5

파일 이름(N): **figure 5**

Format: **TIFF (*.TIF;*.TIFF)**

Save Options

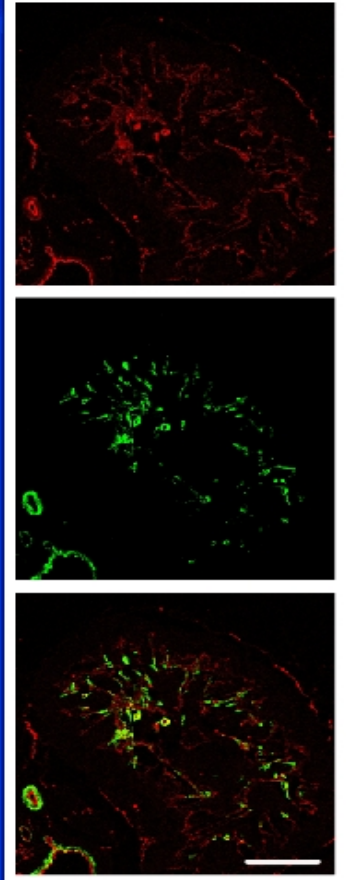
Save: As a Web Slice As a Layer As a Layer (with Background) As a Layer (with Clipping Mask)

Color: Use Document Defaults Use Profile Defaults

Thumbnail

Buttons: **저장(S)**, **취소**

A Control STZ-low dose repeat STZ-high dose single



그림의 유형

- 사진 (photographs)
- 도표 및 삽화 (diagrams or cartoons)
- 숫자자료 제시 (numerical data presentations)

사진 (Photographs)

- Gels, micrographs, radiographs, and pictures of patients
- Provide a ruler, scale bar, or magnification (figure legend)

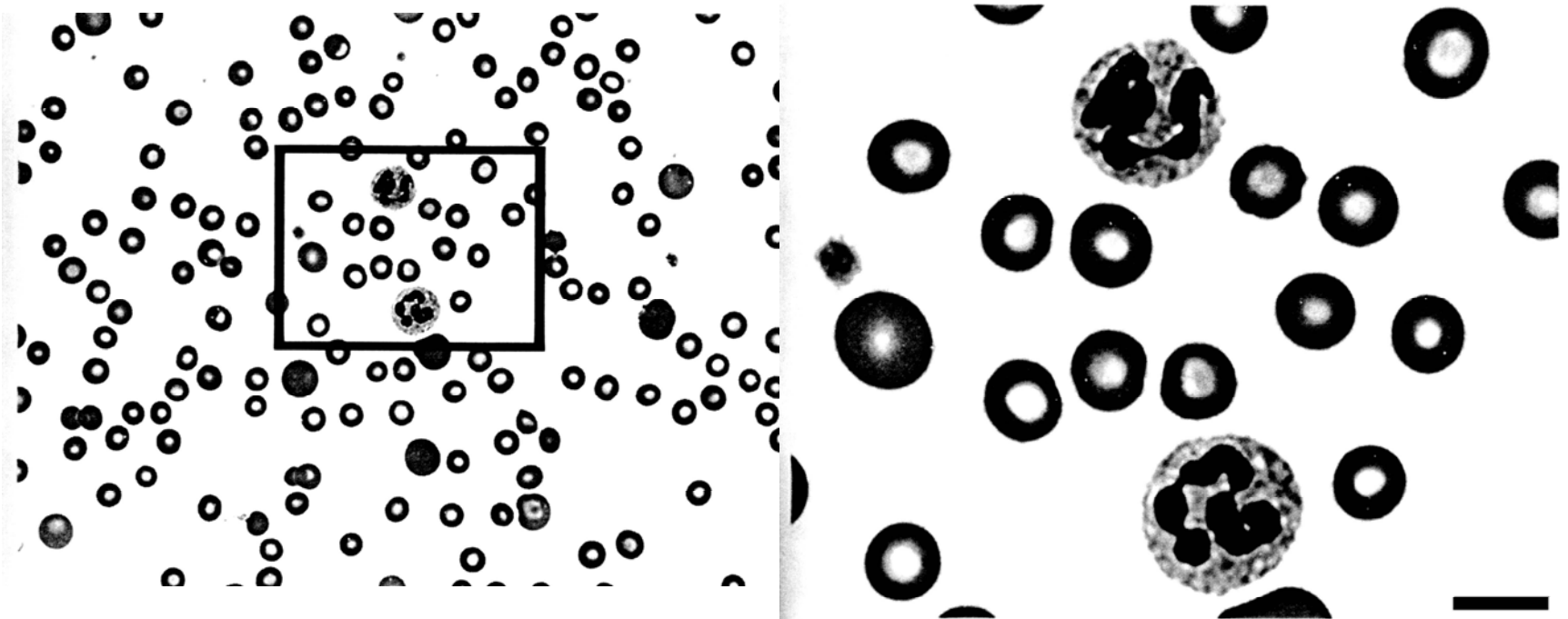


Figure 1. Uncropped (top) and cropped versions of a photograph.
Bar represents 10 μm .

도표 및 삽화 (Diagrams or cartoons)

- Interaction among molecules (Krebs cycle), flow of subjects in a study, and genetic pedigree
- Flow diagram: useful for explaining complicated sampling schemes, algorithms, or protocols.

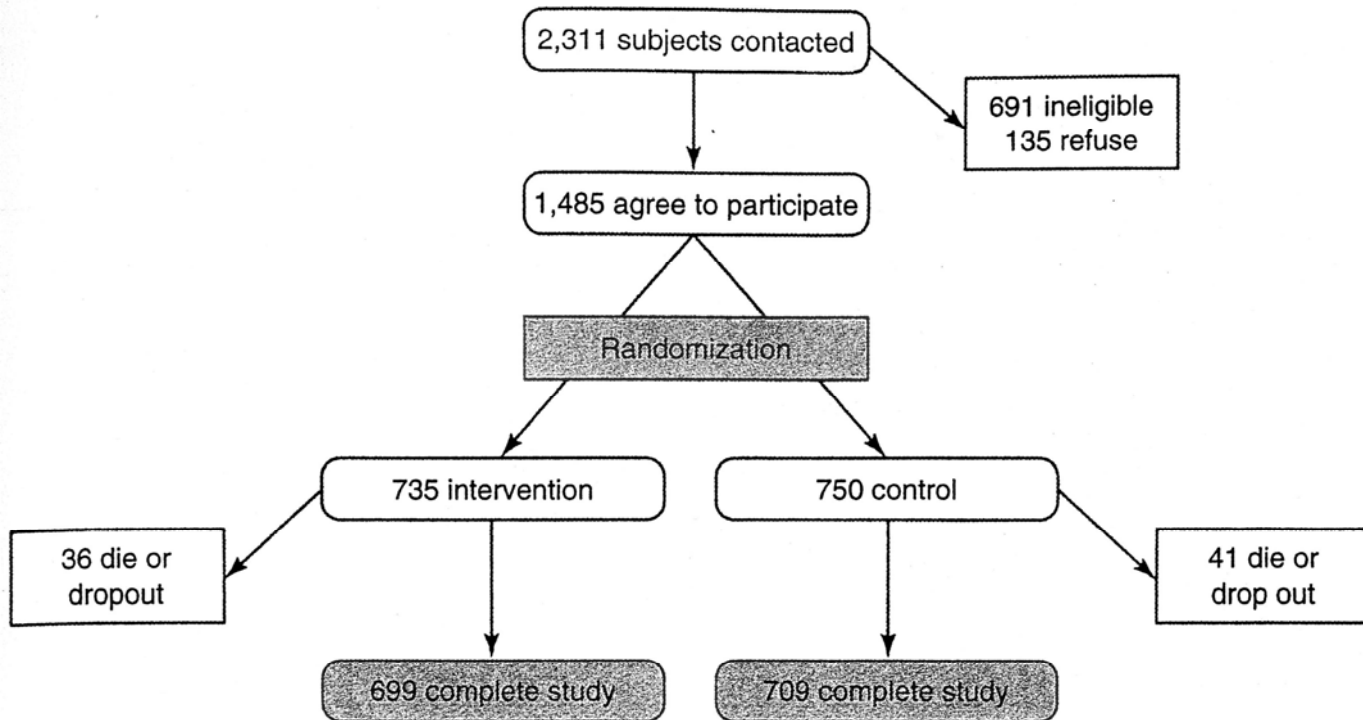


FIGURE 2 Sampling scheme for the study

도표 및 삽화 (Diagrams or cartoons)

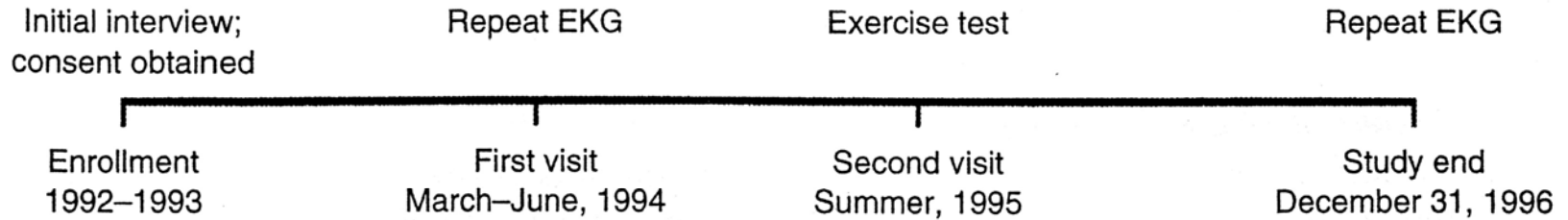


FIGURE 7.2 Timing of measurements

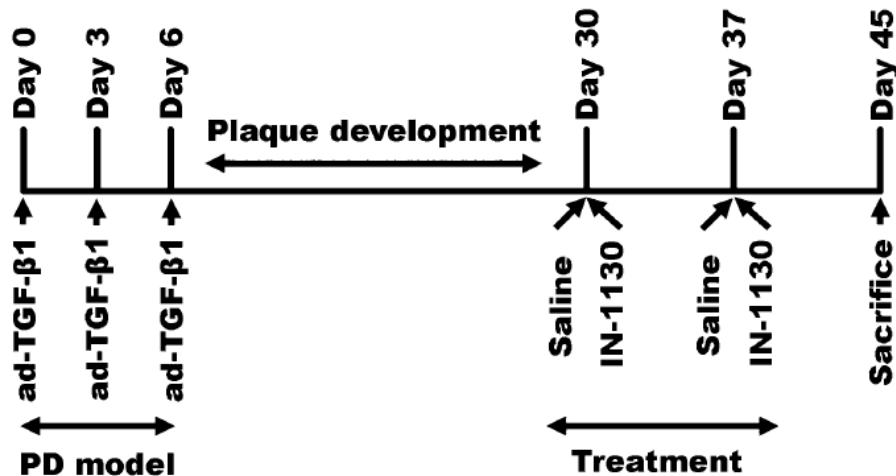


Figure 1 Study design. Rats received repeated injection of adenovirus expressing transforming growth factor-β1 (days 0, 3, and 6; 1×10^{10} particles/0.1 mL, respectively) into the tunica albuginea to generate Peyronie's disease-like plaque and penile curvature, followed by treatment with either IN-1130 (days 30 and 37; 5 mg/kg in 0.1 mL saline, respectively) or saline (days 30 and 37; 0.1 mL, respectively). At day 45, penile curvature and erectile function were assessed, and the penis was then harvested for histologic examination and biochemical study.

숫자자료 제시 (Numerical data presentations)

- Used when the overall pattern is more important than the actual values.
- Figures should have a minimum of four data points. Two or three data points → use text.
- Too many bars or lines or points: counterproductive.

언제 그래프를 사용할 것인가?: 표 vs. 그래프

Table 13. Effect of streptomycin, isoniazid, and streptomycin plus isoniazid on *Mycobacterium tuberculosis*^a

| Treatment ^b | Percentage of negative cultures at: | | | |
|--------------------------|-------------------------------------|------|------|------|
| | 2 wk | 4 wk | 6 wk | 8 wk |
| Streptomycin | 5 | 10 | 15 | 20 |
| Isoniazid | 8 | 12 | 15 | 15 |
| Streptomycin + isoniazid | 30 | 60 | 80 | 100 |

^aThe patient population, now somewhat less so, was described in a preceding paper (61).

^bHighest quality available from our supplier (Town Pharmacy, Podunk, IA).

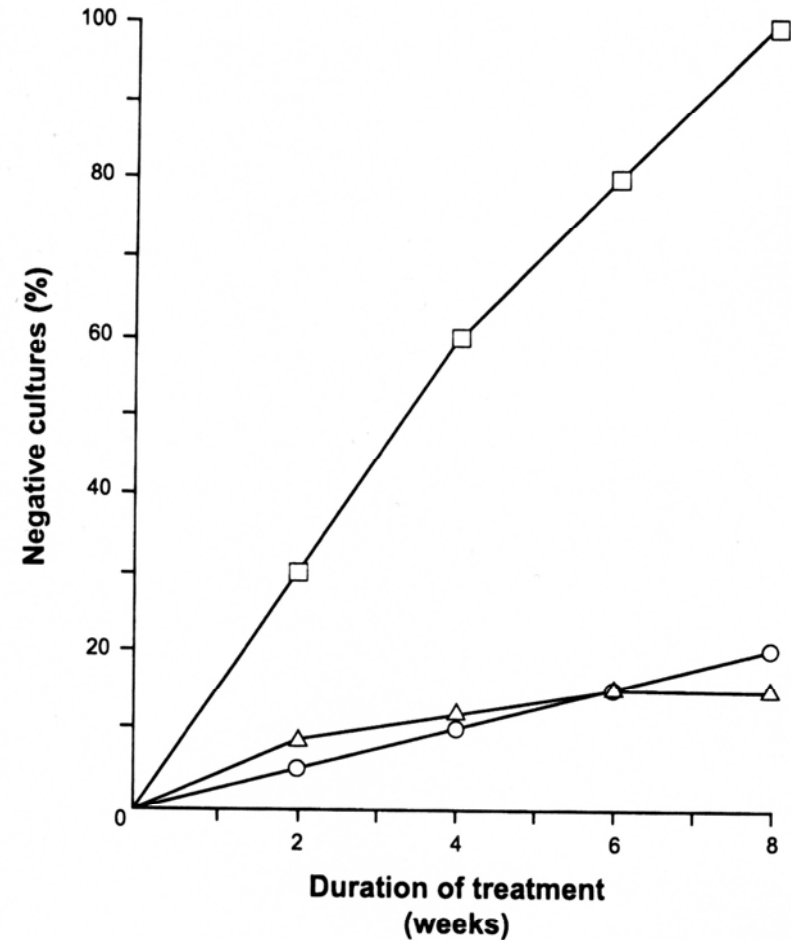


Figure 3. Effect of streptomycin (○), isoniazid (△), and streptomycin plus isoniazid (□) on *Mycobacterium tuberculosis*.

숫자 그림 (그래프)의 유형

- Pie charts: should be avoided, often do not look very professional.
- Scatter plots
- Bar graphs
- Line graphs

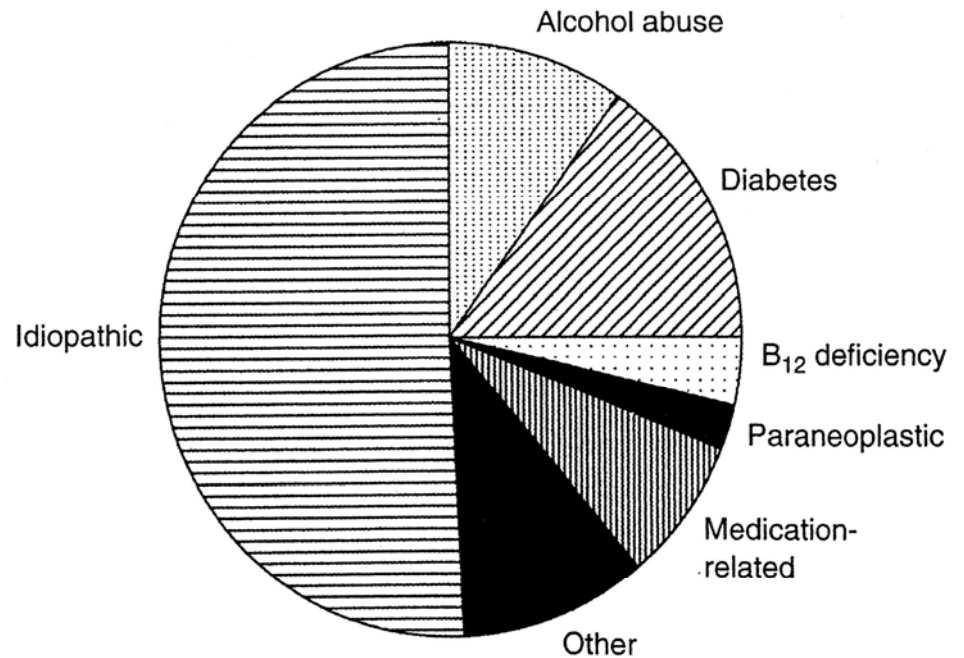


FIGURE 4 Causes of neuropathy in a sample of 112 primary care patients

- Convert data to text or to table.

숫자 그림 (그래프)의 유형 : Scatter plot

- Can easily show the correlation or lack of correlation, between two variables.

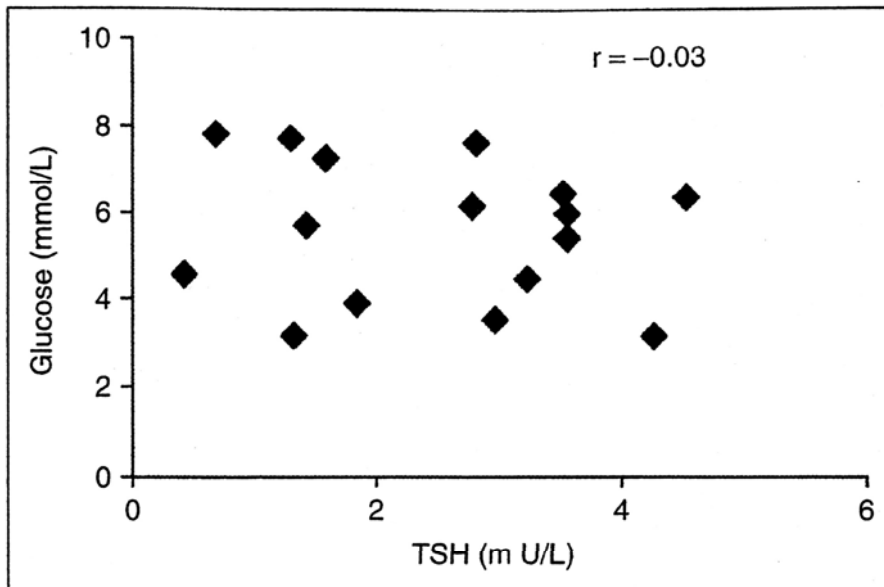


FIGURE 7.10 Lack of association between thyroid-stimulating hormone (TSH) and glucose levels in patients attending a weight-loss clinic

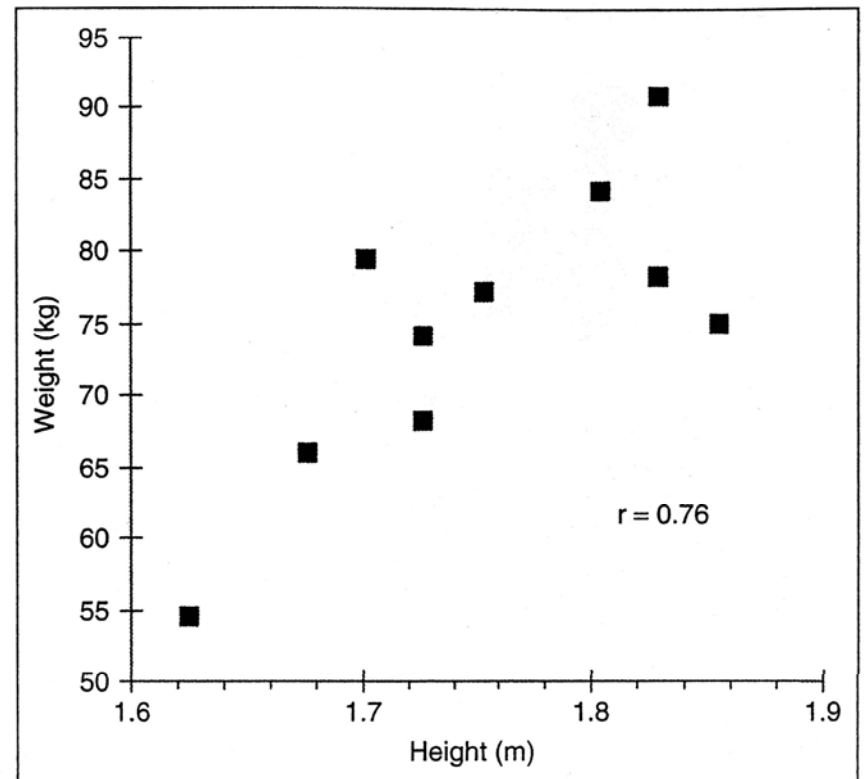


FIGURE 5 Correlation between height and weight in 10 subjects

숫자 그림 (그래프)의 유형 : Bar graph

- Three dimensional graphs: usually not helpful.
- Plane two-dimensional bar graph can demonstrate same results with less clutter

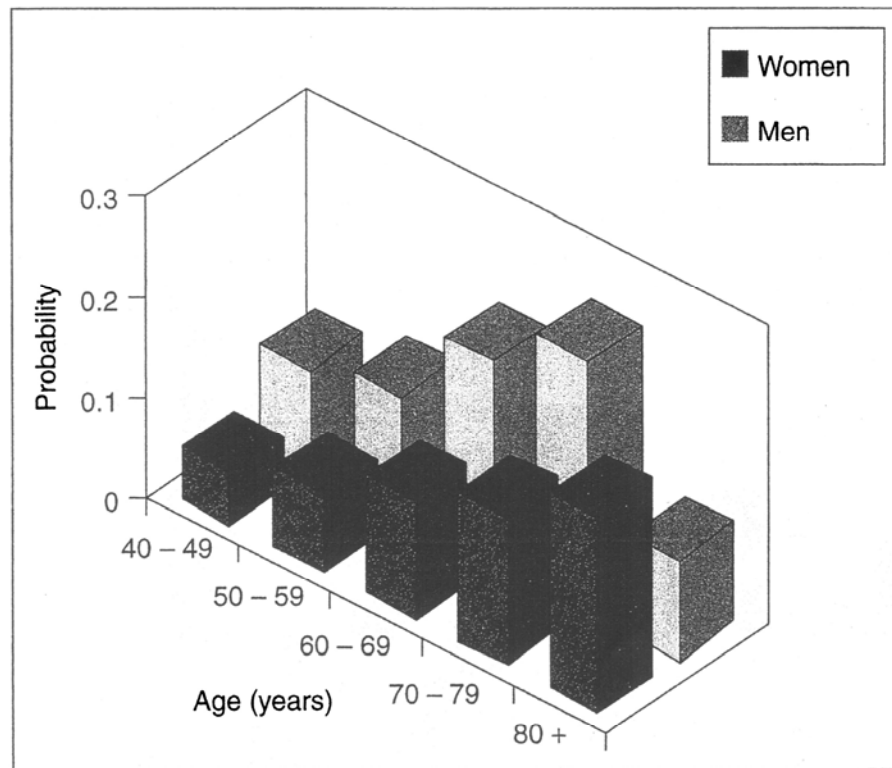


FIGURE 7.13 Likelihood of admission to an intensive care unit (as a proportion of all hospital admissions) by age and sex

숫자 그림 (그래프)의 유형 : Bar graph

- The taller one in each pair strands to the right in most cases, in keeping with the overall trend in the figures

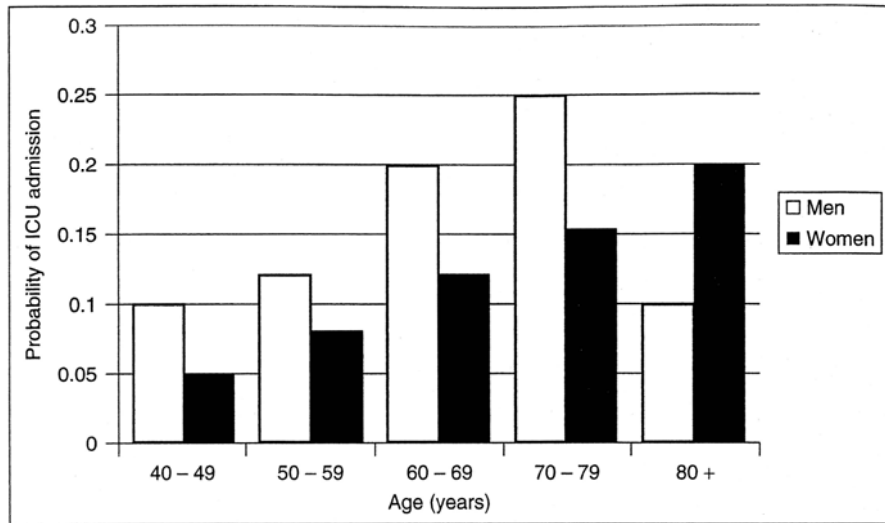


FIGURE 6 Likelihood of admission to an intensive care unit (as a proportion of all hospital admissions) by age and sex

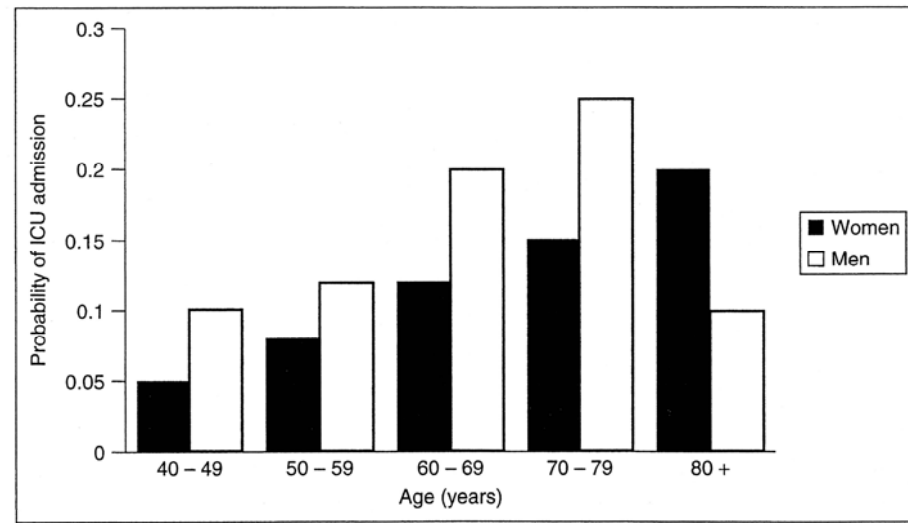


FIGURE 7 Likelihood of admission to an intensive care unit (as a proportion of all hospital admissions) by age and sex

숫자 그림 (그래프)의 유형 : Stacked bar graph

- Useful when the bars represent data that sum to the same quantity (for example, 100%)

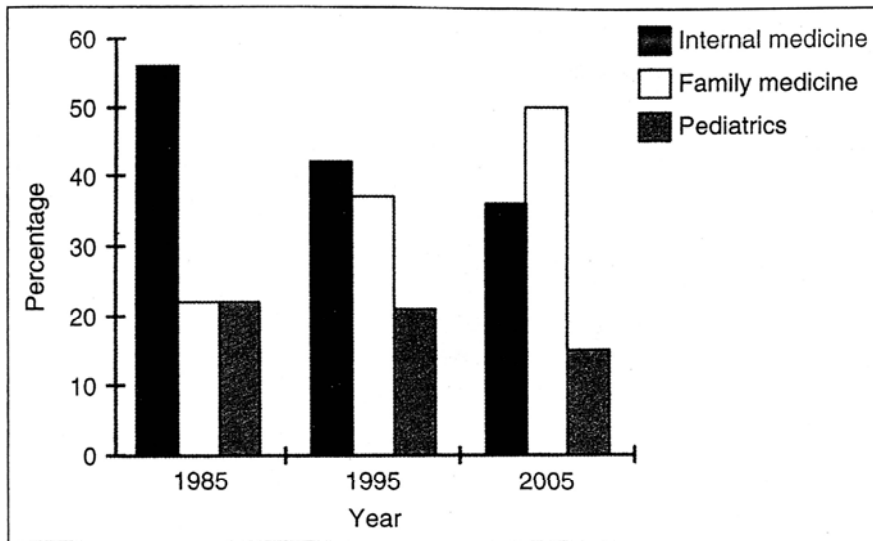


FIGURE 8 Proportions of students in 1985, 1995, and 2005 choosing various primary care specialties

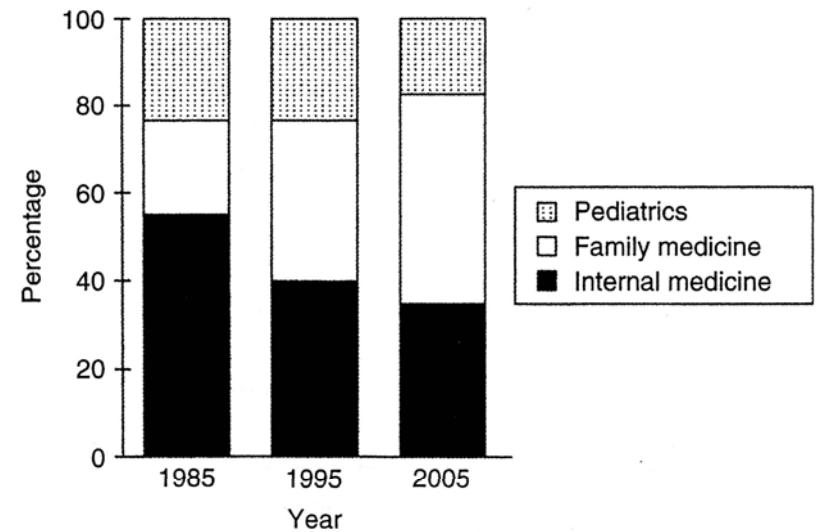


FIGURE 9 Proportions of students in 1985, 1995, and 2005 choosing various primary care specialties

숫자 그림 (그래프)의 유형 : Bar and whisker plot

- Useful type of figure for describing the **distribution of data**: range, mean, median, and 25th and 75th percentiles for continuous variables; 95% confidence interval for the mean, 10th and 90th percentiles.

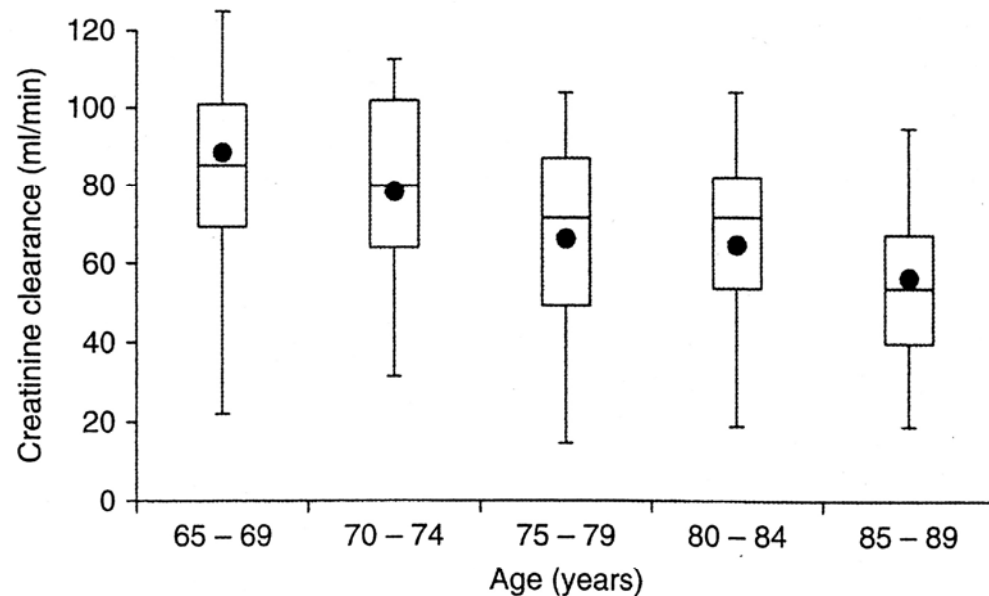


FIGURE 7.27 Mean (filled circle), median (horizontal line), 25th and 75th percentiles (box), and range (whiskers) of creatinine clearance by age of the subjects

숫자 그림 (그래프)의 유형 : Line graph

- If you have more than four groups, consider using two or more figures (or subfigures).

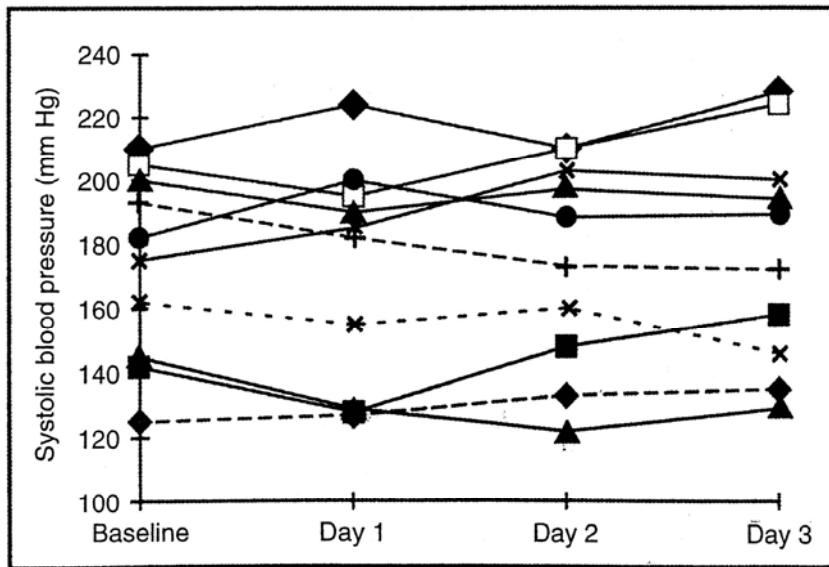
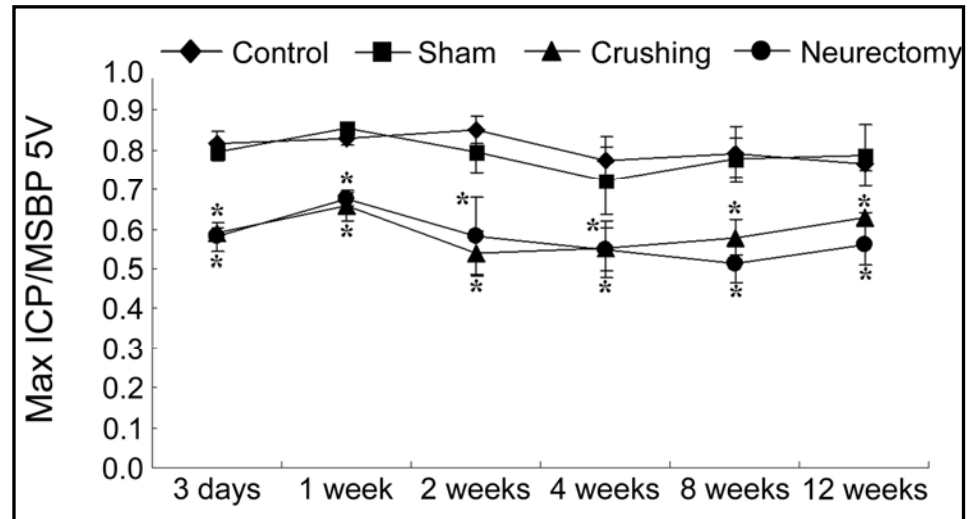


FIGURE 10 Blood pressure in 10 subjects treated with ineffectivipine

- “Spaghetti” graph



숫자 그림 (그래프)의 유형 : Line graph

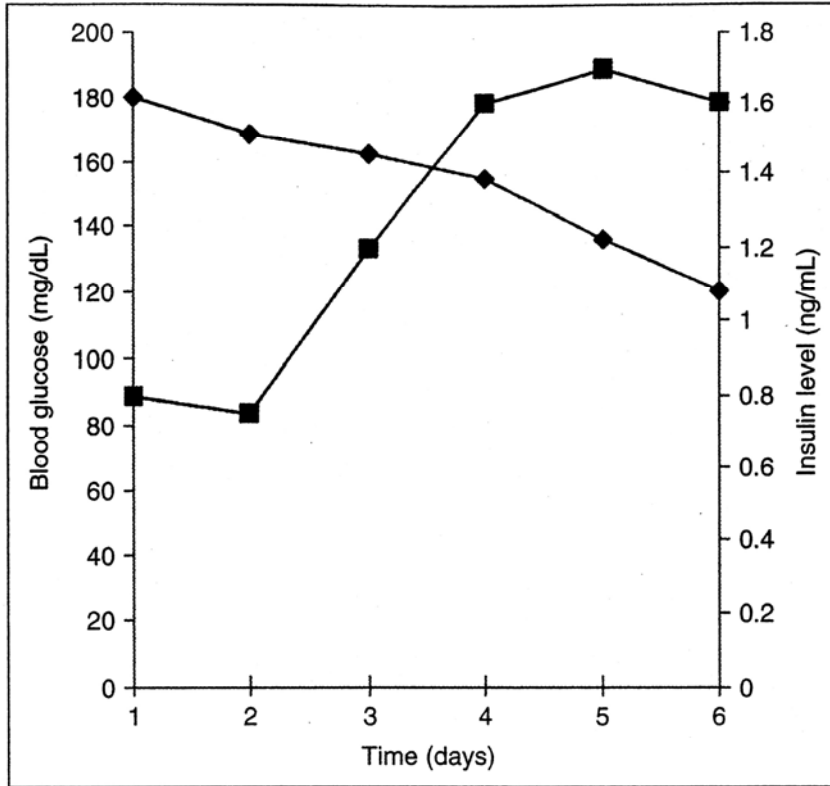


FIGURE 7.5 Blood glucose (diamonds) and serum insulin level (squares) versus time

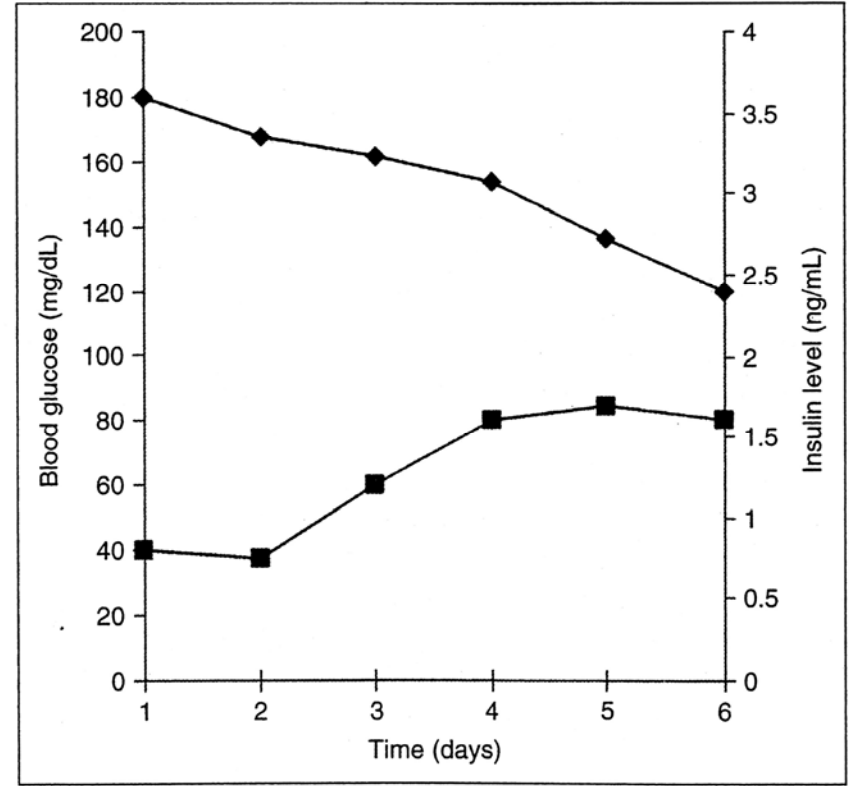


FIGURE 7.6 Blood glucose (diamonds) and serum insulin level (squares) versus time

- Beware (or avoid) of lines that cross.

숫자 그림 (그래프)의 유형

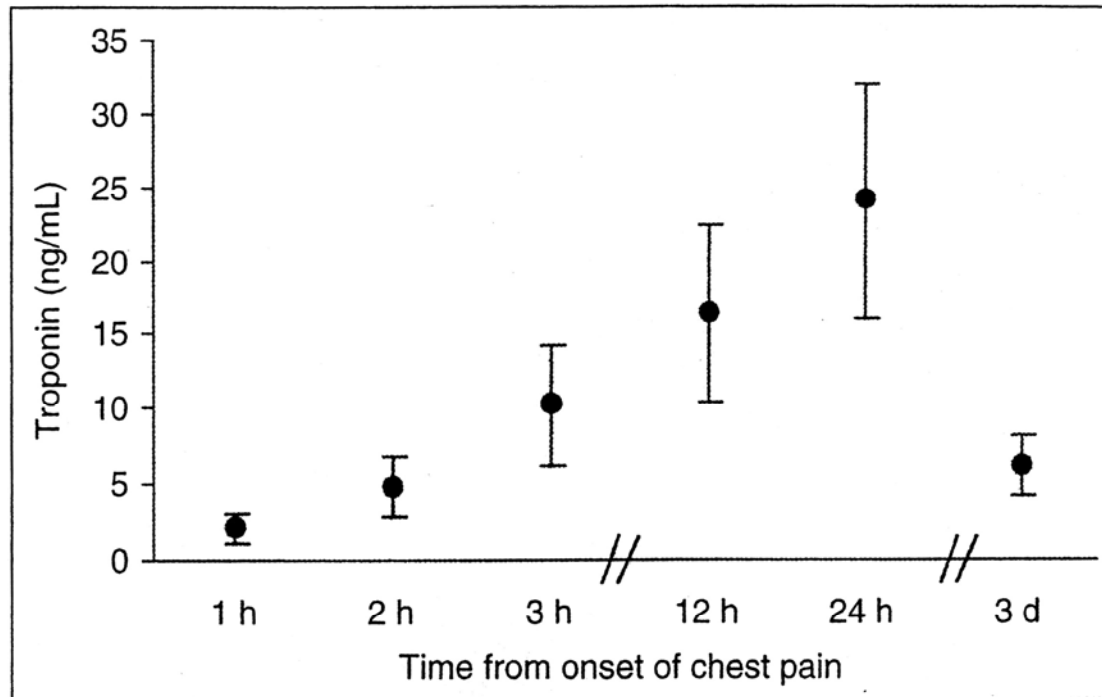


FIGURE 7.9 Mean troponin levels (with 95% confidence intervals) by time in patients with chest pain. Note that the time axis is not uniform

그림설명 및 본문에서의 그림 인용

- The legends describes what is in the figure.
 - Figure 1. Survival was greater in subjects treated with savopril than in controls. (X)
 - Figure 1. Two-year survival among patients with analgesic nephropathy treated with savopril or placebo. (O)
- Include enough information.
- Text
 - “Figure 1 shows (X)
 - who did not drink (Figure 1). (O)

그림 작성 : 점검 사항

1. Does every figure make its point clearly? If not, have you tried alternative versions?
2. Are the axes, lines, bars, and points labeled? Are the scale correct?
3. Does each figure have a legend, not a title?
4. Are the figures numbered, and do they appear in the text in that order?
5. Does the text complement the information in the figures?

Learn from High Profile Journals

Clinical Paper

- New Engl J Med
- JAMA
- Lancet
- PLoS Med

Basic Research Paper

- CNS
- J Clin Invest
- PNAS
- PLoS One

+

- Novelty
- Broad readership
- Quality of figures
 - Histologic staining