



# Japanese Health Care: Cancer Phenotype Diagnosis and Drug Efficacy

Patrycja Rodriguez\*

School of Pharmaceutical Sciences, University of Geneva and University of Lausanne, Geneva, Switzerland

## Abstract

The progression of lung cancer patients in Japan is described along with an overview of targeted tailored treatment. To follow and evaluate treatment efficacy and result, these new targeted therapies with unique personalised medicine pharmaceuticals need for new implementations. Examples of lung cancer patients being treated with the drugs IRESSA (gefitinib) and TARCEVA (erlotinib) are provided. One of the leading causes of cancer-related death worldwide is lung cancer. The significance of measuring illness-specific mechanisms linked to pathway signalling activation of disease-progressive protein targets as well as the quantification of disease progression, where diagnostic-related biomarkers are being applied, is summarised. In order to address the growing expenses and difficulties, an outline is also provided, explaining modifications and adaptations in Japan. A rebuilding of the entire strategy of medical examination and clinical care has taken place as a result of the urgent execution of programmes to address these demands today.

**Keywords:** Health Care; Diagnosis; Drug Efficacy; Lung cancer; Mechanism of action

## Introduction

Maternal-fetal medicine has made significant strides in the 20th and 21st centuries. In affluent countries with access to contemporary obstetrical care, puerperal fever-related maternal deaths, which historically threatened the lives of every woman entering a maternity ward, now, occur infrequently. Additionally, during the past century, the majority of affluent nations have seen a sharp decline in neonatal and infant mortality rates. We now face new and evolving challenges in the vast field of maternal-fetal medicine, however, in contrast to such epic advancement in obstetric and paediatric healthcare [1].

Preterm delivery, a disorder frequently linked to short- and long-term health problems for offspring, has significantly increased during the past few decades. According to the Institute of Medicine, preterm birth in the United States costs at least \$26.2 billion annually in illness, disability, and mortality. Caesarean deliveries have nevertheless increased in popularity despite the potential risk to healthy biome development, with rates in America rising from 5% in 1970 to 32.7% in 2013. The prevalence of mental health issues has sharply increased worldwide, and postpartum depression continues to wreak havoc on the wellbeing of countless new mothers. Finally, a rising number of women in their reproductive years are affected by the diabetes pandemic, which includes gestational glucose intolerance [2].

An increase in childhood chronic illness, the dramatic increase in chronic and developmental sickness in children has been a matter of particular worry in the medical community, in addition to a number of difficulties in the area of maternal health. Rates of a wide range of persistent children diseases have been raising substantially and, as of now, do not appear to be changing course, with chronic disease now outpacing infectious disease as the predominant burden of paediatric affliction. However, according to an association that represents obstetrics and gynaecology societies in 125 countries, it is becoming more and more obvious that modifiable prenatal variables may be a significant component in many of these health issues. A truth that FIGO recently attested to (International Federation of Obstetrics and Gynaecology), Publication of a special notice advocating coordinated action on maternal health to address problems that can be prevented in children [3].

Furthermore, it is frequently believed that different chromosomal

abnormalities are just the result of arbitrary, random genetic changes. Yet, recent data suggests that this environmental approach may also apply to some chromosomal defects, rather than attributing such results only to our genes. For instance, chromosomal abnormalities like Down's syndrome are more common in people who are deficient in specific nutrients, and low dose chemical exposures have been reported to cause genomic instability and an increased propensity for novel genetic mutation [4].

The pronounced vulnerability of the developing child in utero, which results from clear physiological differences between what are found in a developing foetus and the inner workings of a toddler or an adult is another point of particular significance with regard to the gestational phase in the continuum of life. For instance, there is a specific susceptibility to toxic substances during gestation, and exposure levels that might not seem to be dangerous to pregnant people, like alcohol exposure, may have a significant effect on the child [5].

## Discussion

Another point of particular significance with regard to the gestational phase in the continuum of life is the pronounced vulnerability of the developing child in utero, which results from the obvious physiological differences between what is found in a developing foetus and the internal workings of a toddler or an adult. For instance, there is a particular susceptibility to hazardous compounds during gestation, and exposure levels to substances like alcohol that might not appear to be dangerous to pregnant individuals may actually have a big impact on the unborn child [6].

The National Health Insurance programme granted payment

\*Corresponding author: Patrycja Rodriguez, School of Pharmaceutical Sciences, University of Geneva and University of Lausanne, Geneva, Switzerland, E-mail: rodriguez.patrycja@unige.ch

**Received:** 01-Mar-2023, Manuscript No: jcd-23-92086, **Editor Assigned:** 04-Mar-2023, Pre QC No: jcd-23-92086(PQ), **Reviewed:** 18-Mar-2023, QC No: jcd-23-92086, **Revised:** 22-Mar-2023, Manuscript No: jcd-23-92086(R), **Published:** 29-Mar-2023, DOI: 10.4172/2476-2253.1000170

**Citation:** Rodriguez P (2023) Japanese Health Care: Cancer Phenotype Diagnosis and Drug Efficacy. J Cancer Diagn 7: 170.

**Copyright:** © 2023 Rodriguez P. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

for the first four Kampo extracts in 1967. This figure has grown to 148 Kampo formulation extracts, 241 unprocessed medicines, and 5 unprocessed drug preparations as of the time of publication. Because most Kampo medications are administered in this form, the current study only looked at extracts from the plant. The Good Manufacturing Practices (GMP) law was also developed by the government in 1987 to guarantee that all Kampo goods are of consistently high quality. A focus on Kampo medicine was also shared by the pharmaceutical sector, which worked to manufacture high-quality Kampo extracts. Traditional medicine was also covered for the first 52 years of Japan's National Health Insurance, so the two types of medicine coexist in the same system today [7].

We discovered that Kampo medicines were prescribed to 1.34% of all patients. As compared to the fact that 70–80% of Japanese doctors regularly administer Kampo medications in their practises, this seems insignificant. What explains this discrepancy? Although while the majority of doctors regularly prescribe Kampo medications, only a very small percentage of patients do so, most doctors only utilise biomedicine, with the occasional addition of Kampo medications. Table 4 demonstrates that all types of disorders are covered by Kampo treatment, despite the fact that we can surmise that the indications for Kampo medications are somewhat limited [8].

In Japan, the majority of doctors receive specialised training. This is viewed as troublesome by the Japanese government in a society that is ageing like Japan's. General practitioners are in high demand in Japan because elderly patients sometimes have many symptoms at once. Our findings demonstrate that Kampo medication indications are restricted to a single physician in accordance with that physician's speciality, maybe as a result of a western biological diagnostic. This is not consistent with how Kampo medications have traditionally been used; Kampo medicine is a general medical system.

The Kampo extract most frequently prescribed for muscle cramp, lumbago, and abdominal pain was shakuyakukanzoto. This medication is used to relax muscles. Several doctors use it as an alternative to analgesics since it is so effective. 6 grammes of peony root and 6 grammes of licorice root make up this Kampo extract. Glycyrrhizin, an ingredient in liquorice root, has the potential to produce pseudoaldosteronism, which can be extremely severe in rhabdomyolysis. Surprisingly, 70% of the aforementioned 148 Kampo extracts contain licorice root. The danger of pseudoaldosteronism is increased when doctors combine Kampo extracts. An appropriate education and knowledge of drugs are required to prevent this [9].

Another such is the drug kakkonto, which is typically prescribed to treat the common cold. With gargles and troches, Coad provided the ministry. Moreover, we discovered that antipyretics were administered in significant amounts. According to Kampo medicine, such a combination is not ideal because one of kakkonto's main effects is to elevate body temperature in order to get rid of viruses that are susceptible to high temperatures. Antipyretics can hide the effects of kakkonto when used in conjunction with one another. It's probable that this misuse results from doctors prescribing Kampo medical theory in the context of westernised biomedicine while ignoring it.

Thus, education and clinical evidence based on the traditional usage of Kampo medicine should be produced in order to correctly administer Kampo extracts and prevent their misuse. Standardized Kampo diagnosis is required to do this. In order to include a global classification of traditional medicine in the ICD-11 edition, the

WHO set out to construct one. Specialists in traditional medicine and biomedicine will therefore be encouraged to communicate with one another and gain greater international visibility. Extending Kampo education in medical schools and establishing systematic, ongoing Kampo education beyond graduation are essential. It is crucial that Kampo therapies are both safe and effective. So, it is crucial to understand Kampo diagnosis and how to utilise Kampo medications correctly. This will make it possible for Japanese doctors of the future to incorporate Kampo medicine fully into their practises [10].

## Conclusions

With the greatest mortality rate among all malignancies and chronic obstructive pulmonary disease as a risk factor, lung cancer is thought to be the key disease area where the next generation of tailored medications for targeted and stratified patient treatment will make a breakthrough. In the upcoming years, tailored treatments are anticipated for cancers such breast, colon, malignant melanoma, and brain. Cardiovascular diseases, neurodegenerative illnesses like Parkinson's, Alzheimer's, and multiple sclerosis (MSc), as well as obesity and diabetes, are additional disease areas where a large number of pipeline drugs are anticipated to become commercially viable and easily accessible to patients on the shelves of their neighbourhood pharmacy. For the idea of individualised medicine, mass spectrometric technology can offer the "phenotypic fingerprint" needed. A fully integrated e-Health infrastructure system can support a key pathway effort using high-resolution computed tomography in combination with mass spectrometry-driven target biomarker diagnosis.

## Acknowledgment

None

## Conflict of Interest

None

## References

1. Raghu G, Nyberg F, Morgan G (2004) the epidemiology of interstitial lung disease and its association with lung cancer. *British Journal of Cancer* 91:3-10.
2. Jedrychowski W, Galas A, Pac A (2005) Prenatal ambient air exposure to polycyclic aromatic hydrocarbons and the occurrence of respiratory symptoms over the first year of life. *European Journal of Epidemiology* 20:775-782.
3. Ray JG, Wyatt PR, Thompson MD (2007) Vitamin B12 and the risk of neural tube defects in a folic-acid-fortified population. *Epidemiology* 18:362-366.
4. Knox EG (2004) Childhood cancers and atmospheric carcinogens. *Journal of Epidemiology and Community Health* 59:101-105.
5. Langie SA, Koppen G, Desaulniers D (2015) Causes of genome instability: the effect of low dose chemical exposures in modern society. *Carcinogenesis* 36:61-88.
6. Genuis SJ. Nutritional transition: a determinant of global health. *Journal of Epidemiology and Community Health* 59:615-617.
7. Williams MA, Zingheim RW, King IB, Zebelman AM (1995) Omega-3 fatty acids in maternal erythrocytes and risk of preeclampsia. *Epidemiology* 6:232-237.
8. Siddiqi A, Given CW, Given B, Sikorskii A (2009) Quality of life among patients with primary, metastatic and recurrent cancer. *European Journal of Cancer Care* 18:84-96.
9. Yang H, Wang XK, Wang JB (2022) Combined risk factors and risk of upper gastrointestinal cancer mortality in the Linxian general population. *International Journal of Cancer*.
10. Gao D, Lu P, Zhang N (2022) Progression of precancerous lesions of esophageal squamous cell carcinomas in a high-risk, rural Chinese population. *Cancer Medicine*.