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Data Article

Data on substantial gravity of carbon dioxide due to pressured metered-dose inhaler steroid treatments for the 2006 year in Japan

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ABSTRACT

People all over the world should work in each individual against global warming due to greenhouse gas that is made up of a majority of carbon dioxide. On the other hand chloro-fluoro-carbon (CFC) was used with pressured metered-dose inhaler steroid therapy, but CFC became banning the use because of ozone depleting substance. Hydrofluorocarbon (HFA134a, tetra-fluoro-methane) is used as alternative CFC until now. Less-famously hydro-fluoro-carbon (HFA134a) have 1300-fold (mole ratio) energy of heat-trapping relative to carbon dioxide.

On an extremely localized story, we derived substantial gravity of carbon dioxide from sales total of pressured metered-dose inhaler (pMDI) steroid drugs for the year in Japan. The amount of total sales of inhaled corticosteroid drugs on annual 2006 year was 320 hundred-millions yen. 88 hundred-millions yen (27.4% for total ICS sales) was accounted for pressured metered-dose inhaler steroid. Now in Japan there are three kinds of pressured metered-dose inhaler steroid drugs which all use tetra-fluoro-methane (HFA134a). In fact total gravity of tetra-fluoro-methane (HFA134a) from pressured metered-dose inhaler steroid for annual 2006 year was 19.7 t and substantial gravity of carbon dioxide was 10.8 thousand ton. As total gravity of carbon dioxide production throughout the year in Japan was 13 hundred-million ton. Therefore substantial gravity of carbon dioxide by steroids pressured metered-dose inhaler was very small (0.001%)

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compared to total carbon dioxide production in Japan. Until today carbon-dioxide reducing make very slow progress, for that reason medical service worker unexceptionally should exert an effort for carbon-dioxide reduction if only slightly through the daily clinical examination.

Specification table

Subject area	*Chemistry*
More specific subject area	*Global warming*
Type of data	*Figures and table*
How data was acquired	*Interest in global warming, Drugs sales in Japan 2006, CHRONOLOGICAL SCIENTIFIC TABLES 2006 Japanese version*
Data format	*Images*
Experimental factors	*N/A*
Experimental features	*N/A*
Data source location	*Japan*
Data accessibility	*The images are available with this article*

Value of the data

- Unique and important data from new stand point.
- pMDI products substantial amount of CO2.
- The reason to select dry powder or solution of three ICS inhalation methods.
- Enlightenment of global warming.

1. Data

There are three kinds of method (electric nebulizer, dry powder and pMDI) for inhaled corticosteroid therapy. All of pMDIs need alternative CFC such as HFC (HFA) 134a that is not Ozone depleting substance but greenhouse gas. More over HFA134a has 1300 folds (mole ratio) efficacy of greenhouse gas compared with CO2. We examined carbon dioxide emissions due to extremely located pMDI from drug sales 2006 in japan. Total sales of ICS in 2006 japan was 3200 hundred million yen. Sales of pMDI consisted in 27.4% (BDP-pMDI; 19% and FP-pMDI; 8.4%). Substantial gravity of carbon dioxide due to only steroid pMDI was 10835 ton/year in Japan. Total gravity of carbon dioxide production throughout the year in Japan was 13 hundred-million ton. Therefore substantial gravity of carbon dioxide by steroids pMDI was very small (0.001%) compared to total carbon dioxide production in Japan. Until today carbon-dioxide reducing make very slow progress, for that reason medical service worker unexceptionally should exert an effort for carbon-dioxide reduction if only slightly through the daily clinical examination. New technique for pMDI is necessary for HFA (CO2) reduction.