

## Editorial

# Pioglitazone – Quo Vadis ?

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At the outset let me wish you all the members of Association of Physicians of India a happy and prosperous 2012. I wish to thank you all for re-nominating me as the Editor of Journal of Association of Physicians of India.

I have great pleasure in presenting to you the "Diamond Jubilee" issue of JAPI. I would like to know your views on this special issue with a different cover design and contents of articles. We have also invited past editors of JAPI to contribute.

JAPI 2012 Diamond Jubilee issue 2012 has articles predominantly on the current topic of interest i.e. Metabolic Medicine. In the field of diabetology, glitazones has recently been in the forefront of controversies. A brief description of the molecules developed in the last decade will not be out of place.

Troglitazone, the first thiazolidinedione, was withdrawn from the market because of liver toxicity. Muraglitazar, a dual peroxisome proliferator activated receptor (PPAR) agonist, failed to achieve regulatory approval because of concerns about adverse cardiovascular events. Meta-analyses of randomized controlled trials have suggested an increased risk of ischaemic cardiovascular events with rosiglitazone. In contrast, meta-analysis of trials of pioglitazone indicates the possibility of an ischaemic cardiovascular benefit. Robust evidence also shows that both drug increase the risk of congestive heart failure and fractures, but whether any meaningful difference exists in the magnitude of risk between the two thiazolidinediones is not known. The European Medicines Agency has recommended the suspension of marketing authorization for rosiglitazone, whereas the US Food and Drug Administration has allowed the continued marketing of rosiglitazone with additional restrictions. No long term trials with cardiovascular outcome have directly compared these two drugs. Clinical trials have strict selection criteria that may exclude participants at high risk of adverse events, and adverse cardiovascular outcomes can be rare in such trials. Consideration of the evidence from carefully conducted observation studies is essential to determine if any difference in cardiovascular events or mortality exists between the two drugs.

Pioglitazone has recently been implicated for increased incidence of bladder cancer where it has been used in high doses for long time. Four articles on this topic has been published in this issue, highlighting the controversies surrounding pioglitazone. It has been observed that Pioglitazone has been very successful in controlling the HbA1C levels in diabetic patients. This effect has not been seen in other drugs used for controlling hyperglycemia. In the recently concluded International Diabetes Federation Congress various workers opined that it would be too premature to condemn the drug where it is reported that 4%

of patients on pioglitazone are at a risk of developing bladder cancer compared to the 15% risk reduction due to reduced cardiovascular complications in patients treated with glitazones due to its effects of lowering insulin resistance, reducing inflammation and favourable lipid action. It is well known that any drug administered to a patient will have side effects. However, an astute physician will choose the right patient for a given therapy to avoid the side effects. I leave it to the physicians to use their judgement in using this molecule for the benefit of a large population of Type 2 Diabetic patients in India.

The article by Gopi Krishna Panicker and others have also highlighted the proposed regulatory measures for approval of safer drugs. They have discussed various oral hypoglycemic agents and have concluded that only antidiabetic agent which has frequently shown reduced cardiovascular morbidity and mortality is Metformin. Regarding the future of new antidiabetic therapy the U.S. F.D.A. in 2008 and the Committee for medical Products for Human use (CHMP) of the European Medical Agency in 2010 released draft guidelines on evaluation of new antidiabetic therapies before approval for marketing. It is concluded that these measures will provide reasonable assurance to physicians and patients that new antidiabetic drug are not only effective but safe. However these measures will prolong the drug cycle development and marketing by 18 to 24 months and increase the costs by an estimated US \$, 650 to 750 million, which could delay the approval of useful drugs and deprive a large population of diabetic patients especially in our country of new antidiabetic therapies.

The editorial board has invited leading physicians to contribute their experience for JAPI for the Diamond Jubilee year. We will publish the same as and when we get their contribution. In this issue we have published only invited articles. The articles by past editors Dr. G.S.Sainani and Dr. V.R.Joshi gives us their rich expertise and experience. Dr. M. Maiya a leading physician from Bangalore gives us his views on importance of bedside medicine and his impression regarding Ancient profession in modern era. Dr. R.D. Lele has narrated his scholarly insight and modern discoveries regarding role of nutrition and exercise in weight management. Dr. S.V. Khadilkar has taken us on a journey of neurology in the last decade and the scope of diagnostic and therapeutic potential of neurologist in the present times. Dr. H.S. Bawaskar who has a rich experience of the subject on Scorpion envenomation and its present day management has also contributed in this issue.

An appeal to all the members to share their views and experience through JAPI.

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